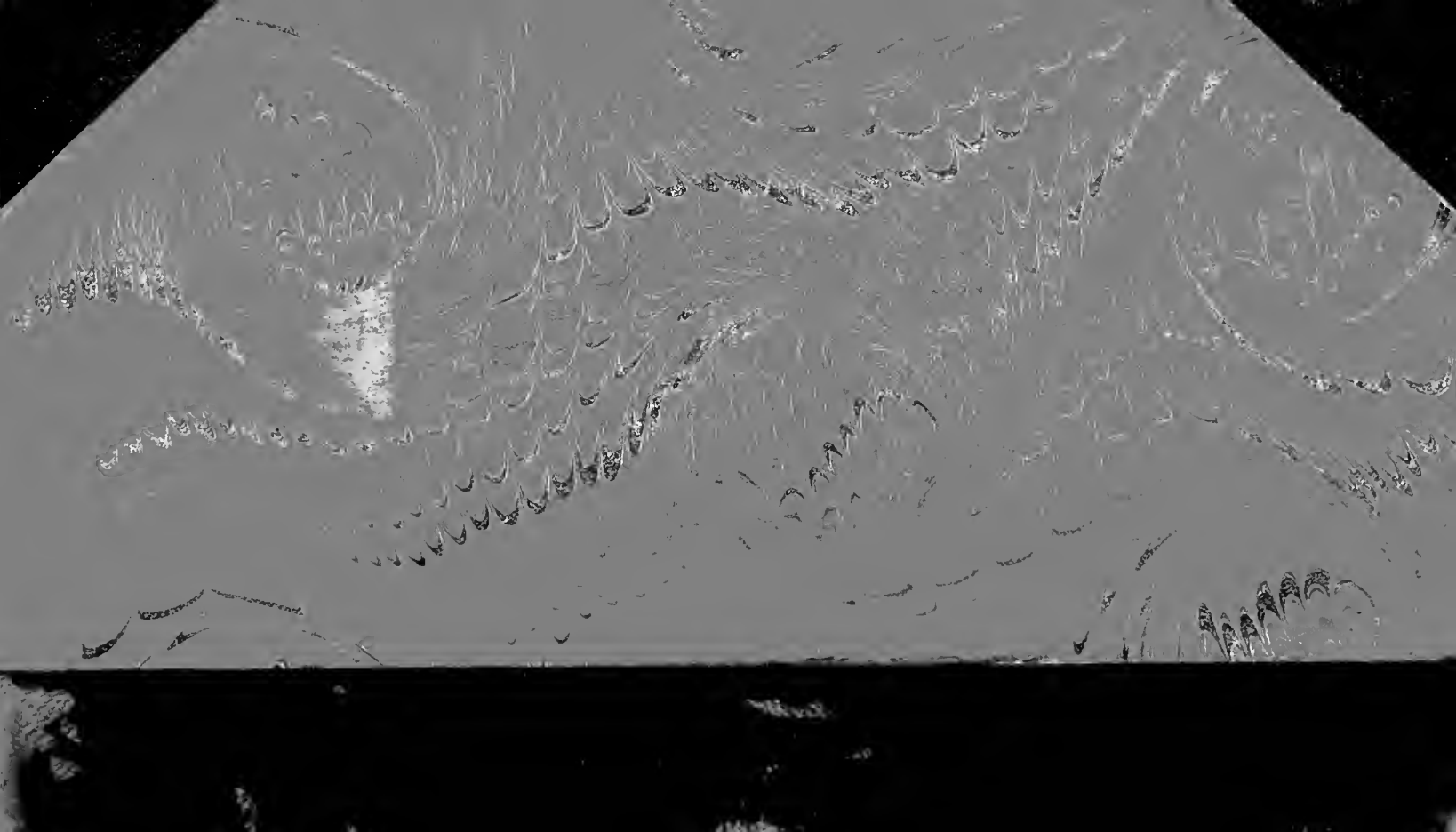

THE ASHEVILLE

Medical Review.

PUBLISHED MONTHLY.

Frank T. Meriwether, M. D., H. Longstreet Taylor, A. M., M. D.
EDITORS AND PUBLISHERS.

Vol. 1. Asheville, N. C., August 15, 1890. No. 1.

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THE ASHEVILLE

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A NEW VAGINAL SPECULUM;

Suitable for both Dorsal and Lateral Postures.

AUGUSTIN H. GOELET, M D., NEW YORK.

The cut shows a modification of the Sims' speculum which is especially adapted to the wants of the general practitioner who finds it to his advantage to curtail the number of instruments which are to be carried around, as well as the expense. It possesses all the advantages of the Sims' instrument and many more, besides serving the same purpose as a bivalve or trivalve speculum, in that it may be used with equal facility with the patient in the lateral or dorsal postures.

It consists of two Sims' blades of different sizes, joined together in opposite directions by a short thick shank, where the greatest weight of the whole instrument is

concentrated. The blades are made thin and light so as not to gravitate when in position. This arrangement places the greatest weight close to the perineum, and in consequence, there is no weight or strain on the blade which is inserted when the support of the hand is removed and the speculum is self-retaining in any position when the back of the blade is well behind the cervix-uteri.

The cut shows the hand in position when it is desired to retract the perineum, which is necessary to obtain a perfect view. The thumb is the fulcrum and the power is exerted in a downward direction by two or three fingers near the shank which connects the two blades. The resistance to be overcome (the perineum) is at the point where the letter P stands in the name under the blade. Unless close attention is paid to the direction of the force to be applied, the instrument will slip out when traction is made.

When used with the patient in the dorsal position the hips must be well down on the edge of the couch and the speculum must be held in the left hand, passed in between the right thigh and leg of the patient to get it out of the way, leaving the right hand free. In many iustances, if the patient is on a table or high couch, it will not be necessary to elevate the anterior vaginal wall to secure a view of the cervix (unless there is considerable relaxation) if the beak of the blade is well up behind the cervix and the perineum is well retracted with the left hand on the instrument as directed; but when it becomes necessary to do so the elevator shown in the cut is hooked in under the symphisis and held by the patient herself, or an assistant; or the Sims' or Nott's depressor may be used with the right hand, or an ordinary dressing forceps holding a pledget of cotton wrapped around it, will serve to push it up out of the way.

If the couch is low or the bed is used, the lateral, or Sims' position gives more satisfaction, especially if the position is exaggerated by throwing the pelvis well over with the patient laying on her chest which is really the

correct Sims' position. Then the anterior vaginal wall falls forward out of the way. This instrument is self-retaining in this position also, hence a greater freedom of the hands of the operator is allowed. Though, when the perineum is to be retracted, the left hand must be used for this purpose and only the right is free. With the ordinary Sims' instrument the left hand is constantly employed in an awkward, tiresome position for holding it in place, because when its support is removed, the instrument drops down or turns around and slips out. In this improved speculum this objection is completely overcome, and the position of the arm in holding it is not so inconvenient and tiresome. The hand is close to the perineum and with the two free fingers (the ring and little fingers) the buttock may be held aside.

The elevator, which is made of flat, hard rubber, S shaped, is shown in its profile view in the cut. It is so curved as to fit up over the symphisis, has rounded edges and, being elastic, causes no inconvenience to the patient. The traction with it is made in an upward and and outward direction. It is by no means a necessary accompaniment of the speculum, though sometimes it proves a great convenience.

The convenience of transportation afforded by its size is by no means a small advantage, as it takes up less than a quarter the space of the Sims' and half the space of a bivalve and may be carried in the hip pocket, so that in a hurried or uncertain call it need never be left behind. For tamponing the vagina without assistance it has no equal. I have used it constantly now for two years and would not be without it. There is one constantly in my bag and I rarely use any other, even in the office, for my nurse finds it easier to hold than the Sims' instrument.

351 West 57th Street.

OPHTHALMIC TECHNOLOGY.

BY S. LE RAY M'CURDY, M. D., DENNISON, OHIO.
SURGEON TO P. C. & ST. L. RY.; MEMBER INTERNATIONAL MEDICAL CONGRESS (NINTH); AMERICAN MEDICAL ASSOCIATION; NATIONAL ASSOCIATION OF RAILWAY SURGEONS; OHIO STATE MEDICAL SOCIETY; MUSKINGUM VALLEY MEDICAL SOCIETY; TUSCARAWAS COUNTY MEDICAL SOCIETY (EX-PRES.); ETC.

It will be my purpose in this paper to classify, or formulate the signs, terms and abbreviations used in the study of the eye in health and disease, so that the articles appearing in current medical literature on this specialty may be better and more readily understood.

Of all cases there are probably none that are shadowed with more mystery to those just beginning to ravel out such problems, than cases of hypermetropic and mixed irregular astigmatism.

In considering this subject I will be called upon to deal principally with refraction and accommodation, normal and in error, and also instruments of precision and other appliances used to detect and correct defects of the same.

Vision is produced by rays of light reflected by external objects through the cornea, pupil, lens and fluids, brought to a focus upon the retina where the visual impression, or picture is made, which is then conducted by the optic nerve to the focus of intellectual perception in the brain. The eye being an optical instrument, a condition necessary to correct and unaided vision is that the retina shall be so related to the refractive media that parallel rays entering the organ when accommodation is at rest shall form an image of the proper focus on the retina. This is refraction. That power of the eye which makes it possible for it to adjust itself for near as well as distant vision instantaneously is accommodation. Such an eye would be perfect, or ammetropic.

When the object to be observed is at twenty feet or more from the eye, rays of light from it are considered practically parallel, and hence do not require an effort on the part of the muscles of accommodation to bring them to a focus. If, however, the object to be observed is nearer than twenty feet, the rays of light are brought to a focus anterior to the retina, the eye being at rest, it will be necessary for accommodation to be used to properly focus the rays.

The acuteness of vision (the abbreviation for which is V, or in German S,) is estimated by Snellen's test-types for distant vision, and Jaeger's test-types for near, or reading vision. In Snellen's types the size of the letter has been determined by placing an object $3\frac{3}{4}$ inches square 200 feet from the eye, this being the distance at which it will always be seen distinctly by the normal eye. Lines are drawn from the four corners of this square ($3\frac{3}{4}$ in.) to the focal point on the retina, making an imaginary pyramid 200 feet long. A letter measuring the distance between these lines to any point measures the acuteness of the vision. A perfect eye can see No. 20 at 20 feet, or $\frac{20}{20}$. In the formula, $V = \frac{d}{D}$, or $V = \frac{20}{20}$. d, the numerator, equals the number that ought to be seen at 20 feet and D, the denominator, indicates the number that can be seen at the same distance. That is, the smallest letter distinctly seen by the normal eye at 20 feet is No. 20, and in an eye that is only able to see No. 50 at 20 feet, the defect is expressed by the formula $\frac{20}{50}$, and so on. Again, if 200 cannot be seen at 20 feet, the card is taken closer to the eye until No. 200 does become visible, and if this is at 8 feet, the defect is $\frac{8}{200}$ When vision is so defective that the card cannot be seen fingers are held up befo e the eyes, and if they can be counted at $2\frac{1}{2}$ feet, it is expressed as fingers at $2\frac{1}{2}$ feet, or if there is only perception of light, it is so stated.

For testing the eyes for reading, working, or piano distance, Jaeger's test types are used. These type are arranged in sixteen sizes from diamond up. A normal eye is able to see No. 1 Jaeger at 8 inches. In testing the

range of accommodation, $\frac{1}{A}$ expresses the eye power to adjust itself for distant rays, $\frac{1}{P}$ is the near point and $\frac{1}{R}$ is the distant point, and is formulated as follows: $\frac{1}{A} = \frac{1}{P} - \frac{1}{R}$.

An emmetropic eye at rest has its remote point at infinity, or $\frac{1}{\infty}$. If the near point be at 7 inches, the formula representing such an eye would be $\frac{1}{A} = \frac{1}{7} - \frac{1}{\infty}$. That is, the eye accommodates for all points beyond seven inches. If an eye is found to be $\frac{1}{20}$ hypermetropic, the total accommodating power is expressed by $\frac{1}{P}$ -|- the amonnt of hypermetropia; example, the near point at 10 inches, and H = $\frac{1}{20}$, $\frac{1}{10}$ -|- $\frac{1}{20} = \frac{1}{6}$.

It will be impossible in the range of a short journnal article to fully discuss these difficult problems. The remainder of the paper will be devoted to the examination of a case which I think will more satisfactorily explain the use of the ophthalmoscope and test lenses than could be told in any other way.

H. L., aged 28; on inspection the eye is found to be normal; on palpation, the tension, or Tn, is found to be — 1. Bowman expresses intra-occular tension as follows: Tn, -|- 1; -|- 2; -|- 3, according to the amount of increase or hardness of the ball, and Tn, — 1; — 2; — 3, according to the diminution of firmness. Our case is found to be Tn, = — 1, which may be due to a low ebb of the physical fluids. He is now placed twenty feet from Snellen's test letters. With the right eye he can see 200 or $\frac{20}{200}$, and with the left eye he can see 100 or $\frac{20}{100}$ The letters are somewhat indistinct at certain angles. This, thus far, clearly indicates error of accommodation. So far we cannot tell whether the defect is hypermetropia or myopia, with possibly an element of astigmatism. He is next given Jaeger's test-types and can read No. 6 with an effort with the right eye and No. 5 with the left. An ophthalmoscopic examination is now made, cocaine being dropped into the eyes to temporarily dilate the pupils. The right eye is first examined, the light being adjusted back and to the right of the head on the same level with the eyes, so that the light passes the cheek,

falls upon the tip of the nose, the patient being directed to look at a fixed point across the room. Directions are also given not to look at the illuminated point on the mirror of the ophthalmoscope, but to keep the axis of vision to the left of it. I take my position to the right and in front. With my head about eighteen inches from the eye and the ophthalmoscope in position, the *red reflex* becomes visible. By slowly moving my head toward the eye of the patient, taking care not to lose the *red reflex*, the blood vessels, if the eye be normal, will appear before the visual field at one or two inches from the eye. In this case I could see nothing with the aperature. The rule is to turn on minus, or concave glasses until the fundus does become visible. This was done, first, — 5 D, then — 1 D and so on until — 4 D was reached, when the fundus became visible. I found the optic nerve, blood-vessels, etc., normal. This being registered I proceeded to examine the left eye, the same rules as regards position being observed as in the right eye. After trying various glasses, I found that -|- 3 D brought the fundus into clear vision.

In using the ophthalmoscope it is presumed that the eye of the examiner is at rest as well as the one examined. If either eye does accommodate, however, the examination will not be reliable, but if they are both at rest the ophthalmoscope will pretty definitely determine the refractive error. In our case the amount of refractive error was found to be as follows: R V, = — 4 D; L V = -|- 3 D. That is, if our ophthalmoscopic examination be correct, our patient would require a glass for the right eye, — 4 D, or No. 10 concave, and for the left eye -|- 3 D, or No. 13 convex.

To verify the correctness of our diagnosis the test lenses are used.

No matter whether the amount of refractive error is approximately known or not, it is customary in using the test lenses to begin at the weakest of a test series. In the right eye we suspect myopia, and hence begin with the weakest minus (—) or concave glass. Blind one eye

and place our patient twenty feet from Snellen's test card and place one lense after another before the eye. The first lense may not improve vision very much, but by continuing in the same line glasses will be found to improve vision to a certain point, and lenses beyond that point will impair vision. In our case the best we could obtain was no No. 50 with a — 3, or — 3 D = $\frac{20}{50}$. I, at this juncture, suspected astigmatism, and by adjusting astigmatic cards found this to be the case. First beginning with the weakest astigmatic lense, I followed them up. I discovered that the lenses improved vision or made lines on the astigmatic cards more nearly alike at an angle of 180°. Continuing along these cylindrical lenses, with the — 3 Sph., still before the eye, I found that a — 5 at the above angle allowed my patient to read No. 20.

In the left eye hypermetropia was suspected and -|- glasses were used to test with, and as in the right, astigmatism was present, but instead of the angle being 180° it was 90°, and the lenses found to bring vision up to normal was a -|- 3 D Sph. with a -|- 1 D Cy. at an angle of 90°.

To formulate:

L V, or O S, = -|- 3 D Sph. with -|- 1 D Cy. axis 90° = $\frac{20}{20}$.

R V, or O D, = — 3 D Sph. — 5 D Cy. axis 180° = $\frac{20}{20}$.

A lady, Mrs. B., aged 50, consulted me regarding severe headache, especially at night, for which she said she had taken every remedy. I attributed the headache to some defect of vision and proceeded to unravel the case. Without entering further into details I ordered glasses per the following prescription, and entirely cured the headache:

Astigmatic Card.—

L V, perpendicular lines plainer.

R V, horizontal lines plainer.

Distant Vision—

L V, = -|- 1 D Cy. ( ) -|- 25 D Sph. axis 90° = $\frac{20}{30}$.

R V, = -|- 2 D Cy. ( ) -|- 25 D Sph. axis 180° = $\frac{20}{30}$.

Near Vision—

L V, = -|- 5 D Cy. ( ) -|- 25 D Sph. axis 90° = No. 3 Jaeger.

R V, = -|- 5 D Cy. ( ) -|- 25 D Sph. axis 180° = No. 3 Jaeger.

The rule for determining the glass for reading distance is to place Jaeger's test-types eight inches from the eye, the glass that reveals No. 1 Jaeger at eight inches and less distincly at seven inches, is the one to be used.

AN IDEAL UTERINE DILATOR--A NEW HEMOSTATIC FORCEPS.

BY J. W. LONG, RANDLEMAN, N. C.

Chairman, section on Gynecology North Carolina Medical Society; Member of Southern Surgical and Gynecological Association; Member Randolph Medical Society, etc.:

Hunter McGuire in his memorable address before the Southern Surgical and Gynecological Association in session at Nashville, 1889, said; "We cannot afford to become mere borrowers; we must be contributors to this our beloved science. Remember the thought of today may become the dogma of tomorrow. He who elucidates an idea, establishes a fact or creates a system, is an universal benefactor of mankind." In the line of surgical instruments and appliances the many catalogues issued by instrument manufacturers attest the wonderful activity the profession is showing in producing more and better instruments than ever before. One recent catalogue, for instance, contains 846 large pages with elegant wood cuts and descriptions of 4,414 different instruments.

In a paper read by title before the Southern Surgical and Gynecological Association last year and published in the Medical Bulletin, April, 1890, I called attention to the requirements of modern surgery in the *make up* of

instruments. This article has been much complimented as setting forth in a clear manner the principles that should govern the manufacture and selection of a surgeon's armamentarium.

Bearing in mind the principles advocated in the paper referred to, I have had made two new instruments that I wish to present to the profession. The first of these is

A UTERINE DILATOR

I began with Dr. Palmer's most excellent dilator as a basis, and gradually through several years worked *out* the *faults* of that instrument and worked *in* some *new* features that will appear as we proceed. By reference to the accompanying cut it will be seen that there are only *two pieces* of the instrument—a feature that no other dilator possesses, so far as I am aware. The parts are held together by the *French* or *open* joint. The handles do *not* cross; so that the right hand blade, for instance, of the uterine end is continuous with the right hand handle. To take the instrument apart, the handles are closed, then *pressed together* till one handle *springs over* the other; this allows the lock to open. It is put together by reversing this manouvre and can be done in *one or two seconds!* The handles are curved gently backwards which experience shows is the most convenient shape, as it brings the hands of the operator *out of the line of vision* enabling one to *see* just how much he is dilating the cervix this shape also makes it easy to hold the dilator with the left hand while an *intra uterine* application is made by means of a probe in the right hand. And I may add that it is by far the best instrument I ever saw to hold the internal os open while making an application to the

uterine cavity. We have all been annoyed in trying to pass a probe mopped in cotton wet with some caustic or stiptic as carbolic acid or co. tinct. of iodine—through the internal os. Even if the os is patulous, how it does contract and grip a probe! Again, we sometimes find it necessary to hold the internal os open while we pass in a curette, or placental forceps, or the nozzle of an irrigator; and a variety of other instruments for intra uterine manipulations.

The blades are small, have the curve supposed to be common to the normal uterus, have a shoulder that keeps the points well away from the fundus, are made of the best steel and are *gold plated* so that caustics have no effect on them. They "feather" just enough to keep them from suddenly slippiug out of place. The whole instrument is highly polished, is very light and *perfectly aseptic.* It is specially appreciable for office work and minor operations within the uterus. I have the large Goodell-Ellinger dilator and use it when I want to "burst the parts asunder,"* but I find myself using it less and less frequently, while the indications for the use of this smaller dilator are constantly increasing. A reference to the cut of this dilator will give an excellent idea of it, and a trial of the instrument itself will convince any practical man that it is a most excellent dilator.

The other instrument I wish to call attention to is

A NEW HAEMOSTATIC FORCEPS.

The cut of it gives a better idea than will words.

* See paper by the author on "The uses of the curette in Labor and Abortion" Read before the North Carolina Medical Society, Oxford, May 27th, 1890.

I claim nothing original about this forceps—except that it is the *combination* of several good points taken from various sources. The *lock* is from Collins haemostatic clamp forceps. "This lock is simplicity itself. Attached to one blade there is a round pivot, which fits into an opening in another blade. In order to hold the two blades in close apposition, as the forceps is closed, the male blade passes beneath a projecting arm attached to the female blade, somewhat similar to a Simpson obstetrical forceps. Its advantages are: 1. There are no crevices to hold dirt, so that it can be easily cleansed; 2. The lock cannot be twisted off by clumsy nurses: 3. The blades are held firmly together, so that there is no wabbling." The shape of the *jaws* I got from my friend Dr. Kelly, in New York. It will be observed that they are very *broad* and taper quickly to a *sharp point.* The sharp point enables one to pick up the smallest vessel; while the breadth and rapid taper allow a ligature to slip easily and surely off the forcpes on to the vessel. This latter feature is one worthy of consideration, for it is annoying to tie a ligature and find you have included the forceps. The jaws are fenestrated to make them lighter. The handles are the ordinary scissors handle and have the usual forceps *catch* to hold them closed. This forceps has a big leverage and will hold any blood vessel or other tissue securely.

Both are of the finest workmanship, made of the best steel, nickel plated and highly polished.

PHYSICAL CULTURE

BY E. P. MANGUM, ASHEVILLE, N. C.

PHYSICAL DIRECTOR Y. M. C. A. GYMNASIUM.

Viewing man merely as an animal, he is a depository of vital forces, which may be excited or depressed, well directed or misdirected. These forces are resident in a complicated structure of limbs, senses, breathing, digesting and blood—circulating apparatus, and their heal-

thy manifestation depends much upon the being thus physically constituted.

A casual glance at the human race, from a physical point of view, shows us several classes of beings. We see persons who have the peculiar air of being well satisfied with themselves, taking everything with a careless and "don't-care" style, unwilling to put forth the slightest physical effort, and calmly dragging out a "lazy" existence.

A second class we find which, though possesed of massive intellectual powers, is simply a bundle of nervous forces, displaying an irritable nature, and ever dependent upon others for that which requires any physical exertion. Here we see one half of the powers of the true man fully developed. Thirdly we have those who seem to be the type of physical developments. A chance observer would be compelled to admire the grand proportions of his physical frame, and would see before him what appears to be the embodiment of perfect health and strength; while to one, whose experience had given him a more critical knowledge, this huge muscular exterior might be merely the hiding place of some vital weakness, and upon the application of the proper test, the great physical being would prove to be but an example of the full development of the other half of the perfect man.

Finally we reach a class in which we have the perfect combination and full development of all the forces of man. The quick, untiring mind, the energetic, well proportioned figure, the cheerful inviting disposition cause us to pause and consider the great difference between this comparatively small and yet vastly superior class, and the large majority which composes the other classes.

A few questions bring us to the solution. Realizing the truth of the old maxim "*mens sana in corpore sano*," our "perfect being" has given full attention to the laws of health, regulating the forces of the body, as well as to the laws of the mind. Knowing the interdependence of

mind and body, he has carefully trained the powers of each, that the one might be a never failing help to the other. Some of the great teachers of educational principles realized this striking truth, and from Rousseau we have the paradoxical expression "The weaker the body is, the more it commands; the stronger it is, the better it obeys." The old saying, "Become robust and healthy in order to become reasonable and wise," is no less true to-day than when first uttered. All experience proves that our physical nature must in no wise be neglected.

As in the education of all the faculties, the training of the physical powers must be careful, and according to certain well defined principles. The tendency to be first in all things, easily leads persons to do themselves serious harm, which all future care may fail to cure. "Moderation in all things" is as true in regard to physical culture as it is elsewhere. The aim in view is full and perfect development, and as nothing in this world attains its complete growth at a bound, we must be content to let natural processes have their way, and patiently doing our part rest assured that all else will be done for us.

No one, at the present time, ever thinks of questioning the necessity of thorough physical culture. From the point of health alone, leaving all others out of consideration, we are forced to acknowledge the beneficial influence. Our system of muscles and tissues is one of continual wear and waste; there must, therefore, be a corresponding agency of repairing and replacing, or the most perfectly organized structure would soon fall to pieces. To the students of physiology, the processes by which this is done are well known, and it is also a well known fact that the process of repairing and replacing new material for that which has been removed is carried on more readily, and with more evident results, in persons of healthy constitutions.

The mistaken idea that physical culture means muscular development for the exhibition of brute force

alone, leads many people to oppose any effort to establish a system of physical culture.

Exercise is the principal and only means of securing good physical developement. This, as we now practice it, is a combination o the system of the early Greeks and Romans with our modern knowledge of physiological science. They cultivated the physical resources merely for the exhibition of great muscular activity. We go beyond this, and seek physical developement because of its great assistance to the full performance of all the functions of both the body and the mind. In a second place, the frame of every individual has its ultimate size, dependent upon the complete growth of each component part. If one is neglected we soon find that some other dependent in its nature, is weak and of but little use. This is the secret of so many badly formed, evidently undergrown persons. It is indisputable that any power will become more useful according as our knowledge of its use increases. The constant exercise of any part of the body necessarily wears the tissues and fibres; all the refuse matter is rapidly removed, and fresh material immediately restored, not only supplying the amount removed, but building up the worn member with a larger supply, giving an increase in size, and more room for wear at the next exercise. Thus by careful attention, a rapid, steady growth of all parts of the body is obtained.

Can a man be strong and not be healthy? Yes: for strength may be due to the great force possessed by some one system of the forces of the body, as the muscular; or great force in one part of the body, as the trunk or the limbs; but health is the uniform and regular performance of all the functions of the body, from the harmonious action of all its parts,—a physical conditon implying that all are sound, well fitting and well matched. In this condition we have the *whole* man, not a *part*. Such a condition can be attained only by careful attention to the physical as well as mental developement.

The intellect can rarely attain, or if it already possesses, can rarely long retain its commanding height, when the bodily functions are impaired. The body itself will be at its best when its claims are most fully shared by mental occupations. Consider what point you will, everything asserts emphatically the necessity of a regular system of physical training at the proper time, that time being the period of the body's growth and developement. The beneficial results of gymnastics or systematized exercise are easily seen in all who have pursued it. The bodily activity, dexterity, presence of mind and endurance of fatigue, the natural results of physical culture, all speak for themselves.

In the Gymnasium we often hear the question "What's the good of doing this?" It is not always easy to antwer. What seems good to one may appear useless to another; but we answer this, it is no use at all as soon as acquired; but the exercise has served its purpose; *you* are altered, *you* are improved, *you* are strengthened, by the act and effort of learning it. True it is that evil often comes from exercise, but never from that which is well directed and wisely used. "Natural and suitable exercise strengthens, excessive and undue exercise weakens and injures." In late years a wrong conception of what gymnastic exercises really are and what they aim at doing, is broadly prevalent. The dangerons and purely sensational performances seen at many places of amusement, have nothing to recommend them but the peril of the life and limbs of the performer, and the qualification of a morbid passion for excitement in the spectator. This is the serious evil which all earnest minded men, eager for the extension of true physical culture, have to encounter. Well may people say and think, "if such performances as these are gymnastics, the less our boys know of them the better."

This is not the case. If our gymnastics of to-day mean anything worth a serious thought, they mean the gradual, progressive system of physical exercise, so conceived, so arranged, and so administered, that it will naturally and uniformly call forth and cultivate the latent powers and capacities of the body, even as the mental faculties are developed and strengthened by mental culture and mental exercise.

CORRESPONDENCE:

Mountain Park Hotel,
Hot Springs, N. C.

Editors Asheville Medical Review: Although cut off from all works of referhnce your correspondent willingly accepts the invitation to write from Hot Springs.

He has been what Jaccoud calls "A Wandering Victim of Phthisis and Medical Tyranny," and what interest the present article may possess will depend on a personal experience in many of the health resorts of this country, and upon the observation of many cases of his disease.

The ideal climate does not exist. The trail of the serpent is over all this fair earth, and truth, like many a sick man, often does not thrive in resorts for the invalid.

The fact that cases apparently identical do well in climates utterly different should prevent any thoughtful person from making the dogmatic statement, "here is the spot and we are the people."

The scrub-oaks of Minnesota, the rocks of Colorado, the lakes of the Adirondicks, the sands of Arizona, would all cry out if they could, "Oh, spare us from our friends!"

The morning after his arrival at Colorado Springs, altitude 6,000 feet, a phthisical and travel-worn Englishman was voluntarily told by his barber "This is a good place for heart disease, Sir, but a terrible climate for the lungs." Tableau! with many meanings!

Often the physician is misinformed or ignorant regarding the place to which he consigns his patient. Probably he does not even know its altitude, much less its sanitary condition or the life one must bear there.

To send a man who has a comfortable house, a good cook and friends to a small room in a strange country where he has poor food and poor water is as ingenious a way to induce disease as can be desired.

Even if the place *were* thoroughly known, it is not possible for any doctor, however well learned and care-

ful, to say at once, just *where* the proper spot for each case is.

It is a matter for individual experience.

The Asheville region presents as many good qualities for the treatment of many of the diseases of the respiratory tract as any part of this country.

Some of the advantages which Hot Springs hold in common with all this section, and some which are peculiarly its own, are to be here noted.

Of the mineral waters of this place, others are better qualified to treat. Nor are the effects of the external or internal use of the water, simple or mineral, to be now discussed.

The Springs flow constantly at a temperature of about 100° Farenheit.

Dr. Chandler's analysis shows that the water is what may be termed a mild calcic-sulphur water, containing some iron. The results of its internal and external use are what would be expected from its temperature and composition.

Used with discretion, many cures of disordered stomach and liver, of nephritis, and of various menstrual and uterine diseases are benefitted.

It is in gout, rheumatism and rheumatic gout that the best results are seen.

The records of many cures and of much alleviation of suffering are here.

The aches and pains of generations have been brought here and often left here.

The baths are beautifully fitted up with marble at the sides and bottoms, and in them the sick and the well find benefit and enjoyment.

The relief obtained from certain *nerve diseases*, commonly classed as "Neurasthenia" and "Brain Fag," may be fairly credited to the baths and general environment, and is worthy of the attention of those who have these troubles to treat.

The study of the factors that go to make Hot Springs a place favorable to the relief of many cases of *Chronic*

Laryngeal, *Bronchial* and *Pulmonary* diseases, is of decided interest.

For those who are not familiar with it, it is necessary simply to say that Hot Springs is a circular, level valley, perhaps a mile or more in diameter, completely surrounded by wooded hill, ranging from 400 to 800 feet.

This circle of hills is broken only where the French Broad rushes in at one side and out again at the other.

The government survey places the floor of the valley at 1,330 feet above the sea; as is seen an additional 800 feet could be had by utilizing the building sites on the hills above.

The resident population is about four hundred.

Whether an altitude of from 1,000 to 3,500 feet does not practically help as many cases of phthesis as one of from 3,500 to 8,000 feet, is a question that merits respectful attention. Your correspondent's experience places him on the affirmative side of that question, and he further states his belief that an elevation of from 3,500 to 8,000 feet kills as many people as it cures. Even where cures are wrought at great elevations—and no one can deny that they are many—it is apt to place the restored in prison. He *must stay there*. Such tyranny is less often manifested towards those who get well in a so-called low altitude.

Nervous disturbances are rarely produced or fostered by any elevation less than 2,000 feet.

It should not be claimed that this Western North Carolina, or any part of it, *approaches* in dryness Colorado or Arizona. Whether extreme dryness is necessary or even desirable for a large proportion of the cases under discussion is a question that practical people now-a-days are asking themselves. Many a consumptive on the plains is better in the wet than in the dry season.

Whether the comparative dryness at a relative humidity of 65 to 70 is not as great as the average case requires or does well with is another question the writer is inclined to say "yes" to. Admitting always that there are certain cases that need the dryest atmosphere obtainable.

Shut in as Hot Springs is by the surrounding hills, the air motion, though constantly felt passing up or down through the river gap, rarely amounts to more than a gentle breeze, and the comfort and protection afforded by the mountains through ten months in the year, cannot be over estimated. This is a point particularly striking to one who has experienced the almost regularly windy afternoons of the west, and of mountain resorts in general. Many a day in the summer months would be more pleasant if the wind one sees playing about the mountain tops came down into the valley. However, the nights are always cool.

There has not been a night in this particularly hot summer, when the mercury did not go down to 69°.

The peculiar influences exerted by the hills over the air currents prevent the formation or lodgment of fogs; though seen at times in the early morning on the mountain sides about, their appearance in the valley does not average once a year.

The soil is in most places sand and gravel and is well drained. There is little mud at any season of the year, and dry, level walks amidst picturesque scenery are on every side. Mountain roads bear off in all directions.

The character of the soil and the absence of winds give freedom from dust.

A mosquito is the rarest of objects.

Physicians who have lived here for years, and old residents say that malaria has never been known.

An intelligent and trustworthy lady observer says that during a residence of 28 years no case of pulmonary consumption has originated in Hot Springs.

The water supply is from springs in different places, and are, in most cases, unimpeachable. The supply for the hotel is piped nearly 9,000 feet from a mountain spring, high up in an uninhabited country. The best of food and all the "creaure comforts" can be had.

Looking the situation over, in all respects, it seems to the writer that there is as much that is desirable here as in any one spot he has yet seen. He has made the ac-

quaintance of many people with pulmonary diseases who have done well, and he believes that if any one will come, and avoiding fatigue and chill, live in the open air in a climate where, as many days are pleasant as anywhere in the country, he will have as good a chance for his life at Hot Springs as at any place.

Above all, in this climate, as in all others, the invalid with impaired respiratory apparatus must be satisfied to get well slowly, and not to mistake the commencement of recovery for the completion of the process.

"We cure by *wit*, and not by *witchcraft*, and wit depends on laggard *time*."

WILLIAM B. BERRY, A. M., M. D.

SOCIETY TRANSACTIONS.

BUNCOMBE COUNTY MEDICAL SOCIETY.

MEETING OF JULY 7, 1890.

Pres. Pro Tem. DR. J. A. REAGAN,	Secretary, DR. J. A. WATSON.

Dr. Karl Von Ruck read a paper entitled

THE PROGNOSIS IS IN PULMONARY TUBERCULOSIS, BASED UPON AN ANALYSIS OF 515 CASES.

In all cases the diagnosis was confirmed by the microscope and the final result determined by enquiry and replies of patients, friends or their physicians. The paper considers the influence of age, sex, heredity, stage of disease, fever, cough and expectoration, the digestive organs, hemorrhage, tubercular disease of larynx, nasal catarrh and stenosis, and the general care of patients as well as their professional management.

As to age the author shows that the percentage of recoveries and improvement increases with advancing years up to fifty and after that a slight decrease is again manifest. The average per cent of recoveries being 11½ and of really improved cases 12½ per cent; no case was considered as having recovered where in addition to recovery of general health and arrestment of local processes, it could not also be shown the tubercle baccilli were permanently absent from the expectoration, when such still continued with regard to sex it was shown that of 290 males 13 per cent improved and 13 8-10 per cent recovered, of 225 females 12 per cent improved and 8½ per cent recovered. Taking females between the ages of 15 and 40 years only 9 per cent of improved and 6 per cent of recovered cases are recorded. The climatric period seemed to furnish a larger proportion of females, being 61 per cent. where male patients predominate for every other decade, except 10 to 20, where females are again in proportion of 68 per cent. All females under 20 years died, but the 41 cases between 40 and 50 years show 25

per cent recoveries, in 33 of these menstruation had ceased. Females were frequently found to have increased fever and gastric disturbances and to lose flesh during menstruation.

Heredity was divided into *direct*, *i. e.*, when phthisic had occurred in ancestors, and *indirect*, when from other causes it was apparent that the parents were in poor health at the time of conception, or the mother suffered severe nutritive disturbances during gestation, also when the patient was one of twins, or the sixth or more of a large family of children, in short when it was reasonable to believe that a poor constitution was transmitted.

Direct heredity was shown in 202 cases or 39 per cent. Indirect in 217 cases or 42 per cent. No material difference appeared in the mortality of either directly or indirectly predisposed individuals, but in 96 cases where neither form of heredity was shown, the percentage of recovery was six times as great or 37 per cent.

In the early stages 24 per cent. recovered and 21 per cent improved, in the later stages 9 per cent. recovered and 11 per cent. improved.

The influence of good digestive organs, the author finds to be paramount and unless present or obtainable by proper management, nothing can be accomplished. The fever, cough and expectoration if not due to temporary causes, such as cold or indiscretion, depend upon stage and local processes, and reflect the intensity of the pathological changes, but the heart action is of greater prognostic significance than either.

The number and form of baccilli the author found to show a relation to improvement, or otherwise, in cases where they were constantly growing less, (proper precautions being used to get a homogenious and uniform specimen,) and especially when small, thin, and the appearance believed to be due to spores, is absent, improvement, both local and general combined, was invariably present.

If during softening and excavation, the management

is so successful that no material loss of flesh, or a gain of flesh is manifest, the case may still be brought to arrestment and even recovery. Tubercular Laryngitis occurred in 116 cases, of whom 12 recovered. 19 times epiglottis was seriously involved, interfering with nutrition, etc. All died.

Only three cases of pulmonary hemorrhage occurred in Dr. Von Ruck's institution, where most of the material was observed, in each case it was due to over exertion. In private practice hemorrhages were noted much more frequently, and the author distinguishes between inflammatory and non-inflammatory forms. The former belong to the first, the latter to advanced stages; almost all hemorrhages he believes to be due to preceeding over exertion, and they all for the time interfere, more or less, with the improvement of patients. Nasal and laryngeal catarrh was present in 90 per cent. of all cases and obstructive conditions in nose in nearly half of them. The removal of the latter, so as to secure free nasal respiration, the author found to have secured improvement, both local and general, in almost all the cases treated.

Circumscribed pleurisy has no prognostic significance but may prevent perforation and pneumothorax and be conservative. Serious pleurisy occurred five times, one time asperation was necessary. For the time the patients lost in a genral way, all improved again after recovery from the complication, and did not seem to be influenced thereafter in their progress.

Tubercular pleurisy with bloody and subsequently purulent effusion occurred twice, requiring operation, both improved for a time but failed to recover.

Finally, the author believes that the personal hygiene and environment of patients, their care of expectoration, ability to take advantage of climate and general management, best in a well conducted institution; their steadfastness of purpose and determination, their estimation of the importance of their affection and its proper management in the early stage, their willingness and

ability to give sufficient time for recovery, but also the experience and interest taken by the managing physician, and his ability, by close observation, to carry out a method of prophylactic thrapeutics for avoidance of reverses and complications, influence the prognosis very much indeed.

DISCUSSION.

In the discussion, which was in the main complimentary in character, and in which Drs. Weaver, Watson and Longstreet Taylor took part, the latter called attention to the high mortality in children under five years of age, as reported by the essayist. He said that this might be misleading, as in reality a larger percentage of very young patients recover than older ones.

This is due partly to the increased metabolic changes in infants and their consequent ability to overcome the inroads of the disease. At the Winyah Sanitarium so few children can be expected that the result is not surprising, but should not be regarded as indicating the usual course.

At the close of the discussion Dr. Longstreet Taylor informed the Society that the Asheville Medical Review would in the future appear monthly, and asked that this periodical be made the official organ of the Society. Dr. Karl Von Ruck moved that the Asheville Medical Review be declared the official organ of the Society and that its editors be given access to the books and records of the Society in order that the reports can be made authentic. Dr. Burronghs seconded the motion. After a short discussion the motion was put and carried without a dissenting vote.

The Society adjourned to meet Monday, August 4, in Dr. Burroughs' office. A paper is to be presented by Dr. S. W. Battle upon Entero-Colitis.

THE 37TH ANNUAL MEETING OF THE MEDICAL SOCIETY OF NORTH CAROLINA.

The 37th annual meeting of the Medical Society of North Carolina was held in Oxford, N. C., May 27, 28 and 29, of this year. Dr. J. M. Hays, chairman of the committee of arrangements, called the meeting to order.

After prayer had been offered by the Rev. W. L. Cunningham, the Address of Welcome was delivered by Hon. A. A. Williams, of Oxford.

After welcoming the society to Oxford and complimenting it on its high standing and personnel, he suggests the building of private and public hospitals for the proper treatment of our sick, both surgical and medical. He very truly points to the hundreds who go from this State every year to be treated. which could be done here as well as elsewhere but for the lack of suitable houses and hospitals. Dr. J. A. Hodge, of Fayetteville, responded on part of the society in a very pleasant speech, pointing to Oxford as at the head of culture and refinement the State over.

After the secretary had called the roll, the president, Dr. Geo. G. Thomas, announced the following committees:

Commmittee on Credenentials—Drs. S. D. Booth, J. H. Way and L. J. Picot.

Committee on Finance.—Drs. W. H. Whitehead, W. H. Lilley and G. W. Purefoy.

The president then made his address, in which he suggested that the board of examiners be asked to assume supervision of the laws regarding registration and practice; that the elections for the board of examiners be held every two years to succeed those whose whose terms would then expire in accordance with a resolution to be passed by the Society, viz: That the new members of the Board be divided into three classes, three to serve for six years, two for four years, two for two years and their successors for six years.

He also recommended that all members of this Society

of twenty years standing be placed upon a separate list to be styled, "Honorary Fellows" of the Society, and to be exempt from dues.

Drs. A. W. Knox, L. G. Broughton and R. G. Noble were appointed a committee to consider and report on the suggestions contained in the president's address.

Dr. J. W. Long made, in his rooms, a few demonstrations in urinary chemistry which were of great interest, but owing to his being called home he could not carry out his purpose as thoroughly as he wished.

FIRST DAY—AFTERNOON SESSION.

Dr. L. G. Broughton, chairman of the section on practice, being absent, Dr. J. H. Williams, of Asheville, read a paper on "The propriety of Interference in Gun-shot wounds of the Abdomen," which, on motion, was referred to the committee on publication.

Dr. J. W. Long, of Randleman, then read a paper on "The use of the Curette after Labor and Abortion." which was referred to the committee on publication. Dr. Long was called home by telegraph before he finished reading his paper.

The committee on suggestions contained in the president's address reported as follows: They approved the clause concerning the biennial election of two members of the board of examiners, and that regarding the board of examiners being a committee to supervise the laws of registration, etc.

In regard to the creation of Honorary Fellows, they recommend that all members of the Society for thirty years and in good standing, should be Honorary Fellows, with all the privileges of the Society and exemption from dues. They also recommended that a committee of five be appointed by the president to receive and consider the place and time of next meeting.

Their report was accepted except that part relating to the time and place of meeting, and that making the board of examiners a committee of supervision of the laws of registration, etc.

After much discussion the latter question was indefinitely postponed for discussion.

Dr. W. A. Hammond, of Washington, D. C. then read a paper upon "The Differential Diagnosis of Diseases of the Spinal Column." Dr. Hammond in answer to question by Dr. Long as to the effect of excessive sexual indulgence upon the etiology of locomotor ataxia, replied that ninety-nine per cent. of spinal disease was caused by excessive sexual indulgence, alcohol and syphilis, and that the greatest of these was sexual indulgence.

The president then announced the following committee of censors: Drs. W. C. McDuffie, R. L. Payne, Jr. and T. A. Anderson.

FIRST DAY—EVENING SESSION.

Dr. C. M. Poole introduced a resolution concerning the inebriates of this State, and that a committee of five be appointed to memorialize the Legislature and urge the necessity of caring for these unfortunates. This was carried and the following committee subsequently appointed: Drs. C. M. Poole, T. D. Haigh, J. J. Summerel, Thos. F. Wood and R. H. Lewis.

Dr. Hodges then read a paper on "The Insane in the State," which was discussed by Drs. Wood, McDonald, Foote, Roberts and Miller.

SECOND DAY—MORNING SESSION.

A motion introduced by Dr. Lilly was adopted, that a committee of five be appointed to set on foot a place to secure records of the late Confederate Medical Department.

The committee appointed was as follows: Drs. E. Burke Haywood, S. S. Satchwell, C. J. O'Hagan, John McDougold, and Thos. F. Wood.

The election of a board of examiners being in order the following gentlemen were nominated: Dr. Geo. G. Thomas of Wilmington, by Dr. Thos. F. Wood; Dr. J. L. Picot of Littleton, by Dr. C. J. O'Hagan; Dr. Julian M. Baker by Dr. John McDonald; Dr. W. H. Whitehead of Battleboro, by Dr. S. S. Satchwell; Dr. W. H. H. Cobb

of Goldsboro, by Dr. Hadley; Dr. W. J. Jones of Goldsboro, by Dr. W. Galloway; Dr. W. H. Lilly of Concord, by Dr. J. E. Ashcroft; Dr. Allmand Holmes of Clinton, by Dr. Hill; Dr. J. W. McNeil of Fayetteville, by Dr. W. C. McDuffie; Dr. Robt. S. Young of Concord by Dr. Burton; Dr. A. B. Pierce of Weldon by Dr. Lollicoffer; Dr. R. L. Payne, Jr. of Lexington; Dr. S. W. Battle of Asheville, by Dr. H. T. Balinson; Dr. G. W. Purefoy of Asheville, by Dr. Whittington; Dr. Dunn of Raleigh, by Dr. G. A. Foote; Dr. J. H. Way of Waynesville. by Dr. Wilson; Dr. G. W. Long of Graham, by Dr. Robt. S. Young; Dr. John McDonald of Washington, by Dr. Geo. A. Foote.

Drs. A. J. Noble, J. A. Hodges, E. B. Lolliecoffer and Wilson were appointed tellers.

The first ballot resulted as follows:

Dr. J. L. Picot,	110	Dr. S. W. Battle,	40
" W. H. Whitehead,	93	" W. H. H. Cobb,	34
" G. W. Long,	89	" J. B. Dunn,	34
" Robt. S. Young,	88	" J. W. Faison,	33
" Geo. G. Thomas,	80	" W. H. Lilly,	26
" Geo. W. Purefoy,	78	" Allmand Holmes,	25
" R. L. Payne, Jr.,	74	" A. B. Pierce,	24
" J. M. Baker,	58	" W. J. Jones,	23
" J. W. O'Neill,	58		

Number of votes cast, 133; neceesary to election, 67. The following were then declared to be elected a Board of Medical Examiners, the first three to serve six years, the next two for four years and the last two for two years. Dr. L. J. Picot of Littleton, W. H. Whitehead of Battleboro, Geo. W. Long of Graham, Robt. S. Young of Concord, Geo. G. Thomas of Wilmington, Geo. W. Purefoy of Asheville, and R. L. Payne, Jr., of Lexington.

The following committee on nominations were then appointed: Drs. Frank Duffe, R. S. Young, W. H. H. Cobb, F. C. Jones, J. A. Hodges.

Dr. G. C. Smith of Concord was then, upon motion of Dr. Bahnson, elected an Honorary Fellow of the Society.

A conjoint session of the State Board of Health and

the Medical Society was then held, the president of the Board of Health, Dr. H. T. Bohnson, presiding.

Drs. Wood, O'Hagan and Bohnson urged upon the Society the vital necessity of obtaining legislation upon matters relating to sanitation.

The powers of the Board are very limited, and while matters are improving, the public must be instructed as to the work and purposes of the State Board of Health.

Certainly the State Legislature should pass laws giving the Board legal control of all sanitary regulations requiring registration of vital statistics, and appropriating money sufficient to carry out the letter of the law.

Dr. Venable read an article upon the sanitary analysis of water which was of much interest to all present.

SECOND DAY—AFTERNOON SESSION.

Dr. Braughton read his report as chairman of the Section on Practice, which was referred to the Committee on Publication. Dr. Satchwell then read the report of the Obituary Committee, containing an eulogy on the late Dr. Will Geo. Thomas. Dr. Julian N. Baker read his report upon the "Progress in Pathology and Microscopy," after which a paper on "Are the masses passed after the administration of large doses of sweet oil—*gall* stones?" by Dr. Thos. S. Burbank, was read by Dr. Thos. F. Wood, the author being absent.

This paper was discussed by Drs. Wood, Payne, Roberts, Nicholson, Monroe, McDonald, Poole and Thomas' and the consensus of opinion was, that while the oil is not specific nor even beneficial in all cases, the chemical experience has warranted its use in gall stone colic, and that good results may usually be expected.

Dr. McGee then read a report on Materia Medica and Therapentics, which was referred to the Committee on Publication.

Dr. Young, from the Committee on Nominations, presented the following report:

For President, Dr. Richard H. Lewis.

For Vice Presidents, Drs. S. W Battle, J. L. Nicholson and W. H. Lilly.

For Secretary, Dr. J. M. Hays.

For Treasurer, Dr. C. M. Poole.

For Orator, Dr. L. G. Braughton.

For Essayist, Dr. T. E. Anderson.

For Committee on Publication, Drs. Thos. S. Wood, W. W. Lane, J. M. Hays and Thos. S. Burbank.

For Delegates to the Virginia Medical Association, Drs. P. L. Murphy, A. R. Lollicoffer, J. M. Baker and L. L. Sasser.

For Obituary Committee, Drs. S. S. Satchwell, J. D. Roberts. W. J. Jones and Geo. A. Foote.

For Delegates to the American Medical Association, Drs. Chas. J. O'Hogan, A. W. Knox, J. W. McNeill, Thos. Hill, Thos. E. Wood, N. B. Herring, R. F. Lewis S. D. Booth, Joseph Graham, John Manning, E. R. Michaux, J. M. Hodley, W. D. Pemberton and Jas. S. Laferty.

Delegates to the Tenth International Congress, Drs. J. A. Hodges, A. G. Carr and Robt. S. Young.

On motion, the report was adopted.

During the afternoon session papers were read by Dr. L. G. Braughton, "On a Case of Typhlitis;" by Dr. Robertson, on "The Opium Habit among Negroes;" "Report of a Case of Vesicle Calculus," by Dr. O'Hogan; "Report of a case of "Oblique Fractures with Shortening," by Dr. L. L. Stratton, read by Dr. O'Hogan; "A Case of Tobacco Amourosis," by Dr. Lewis; "On Fluoresceine in the Detection of Foreign Bodies in, and Ulciers of the Cornea," by Dr. Wood; and a paper by Dr. Anderson, on "Extra Uterine Pregnancy of Five Years standing."

SECOND DAY—EVENING SESSION.

Dr. W. J. James, of Goldsboro, delivered the annual oration, after which the selection of the place of the next meeting being in order, was taken up.

Snow Hill, Moorehead City, and Asheville were placed in nomination, and Asheville chosen.

THIRD DAY—MORNING SESSION.

On motion, the last Tuesday in May was appointed the time of meeting.

Dr. Lilly made the report of the Finance Committee, after which a paper by Dr. Satchwell, on "Influence of the Teeth upon Health," was read by title, and referred to the Committee on Publication.

Dr. Thos. F. Wood, Chairman of the Committee on the Revision of the U. S. Pharmacopœa, made his report, referring to the meeting of the convention held in Washington, D. C., May 7th, 8th and 9th. This report was adopted.

Dr J. W. McNeill introduced a motion that the officers of the Society be elected by ballot, which motion was laid over until the next meeting.

Papers were then read by the following gentlemen:

Dr. Purefoy, "Report on Gynaecology," read by title; Dr. Hyatt, on "Electricity in the Treatment of Uterine Diseases;" by Dr. Whittington on "Fibroids of the Uterus," which papers were referred to the Committee on Publication.

Drs. Wood and Lilly then conducted the new President, Dr. Richard H. Lewis, to the chair.

Dr. Wilson read a paper on "A case of Typhoid Fever," followed by a papar on "Anti-Pyrine, a substitute for Tracheotomy in Diphtheria," by Dr. Robinson; and a "Report of a Case of Fracture of the Bones of the Skull," by Dr. Hays.

After the discussing of the Registration Laws, the President announced the following Chairmen of Sections:

On Practice—Dr. W. H. Harrell.

On Surgery—Dr. Oscar McMullen.

On Obstetrics—Dr. W. P. Whittington.

On Gynecology—Dr, J. W. Long.

On Materia Medica—Dr. R. M. Ferguson.

On Anatomy and Physiology—Dr. W. A. Graham.

On Pathology and Microscopy—Dr. Albert Anderson.

On Therapeutics—Dr. W. H. Wilson.

On State Medicine and Medical Jurisprudence—Dr. J. M. Taylor.

On Leader of Debate—Dr W. C. Galloway.

Dr. Way offered a resolution that a vote of thanks be tendered the retiring Board of Examiners, which motion was adopted.

Drs. Booth, Cheatham and Roberts reported cases of Stricture of the Oesophagus, which were very interesting.

The President requested the Society to make a note that the Committee on Scientific Investigation, composed of the last six presidents of the Society, would be expected to make a report next year.

The Committee on the Pittman Prize asked for more time, which was granted.

After a vote of thanks had been tendered the citizens of Oxford, on motion, the Society adjourned to meet next year.

The committee of arrangements for the next meeting in Asheville on the last Tuesday in May, 1891, are as follows: Dr. M. H. Fletcher, chairman; J. S. Grant, secretary; Dr. S. W. Battle, Dr. W. P. Whittington, Dr. H. L. Taylor, Dr. C. E. Hilliard, Wm. E. Breese, president First National Bank, and Chas. D. Blanton, mayor of Asheville.

A resolution was passed authorizing the Board to issue licenses to those physicians who had failed to register, provided such applicant should present a certificate from the clerk of the Supreme Court of his county, that he practiced medicine as a means of livlihood before March 7, 1885, and when the Board is satisfied of his good moral character.

THE ASHEVILLE MEDICAL REVIEW.

A Monthly Journal of Medicine and Surgery.

Frank T. Meriwether, M. D.,
H. Longstreet Taylor, A. M. M. D., } Editors and Publishers.

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AUGUST 15, 1890.

Entered at the Post Office at Asheville, N. C., as second class matter.

EDITORIAL.

Asheville is now the leading health resort of the Eastern, Southern and Middle States, and the profession throughout the country should be kept informed of its advantages and climate from a scientific standpoint. For this purpose the Asheville Medical Review has been founded. At the same time the requirements of Western North Carolina and Eastern Tennessee for a local medical journal will not be forgotten. In its columns will be found matter of local interest to the profession as well as a review of the progress of the medical sciences the world over. Frank T. Meriwether, M. D., and H. Longstreet Taylor, A. M., M. D., will publish and edit the Review.

The Asheville Medical Review has been established to supply a general as well as a local want. Anyone desirous of turning to the records of Asheville's climate

has not been able to find them. An occasional article has appeared in the pages of the medical journals of the country, more or less reliable and complete, according to the industry and ability of the writer, but from this time on the files of the REVIEW will contain data to be furnished by the United States Signal-service officer stationed here, as well as reports of the sanitary condition of the town and neighborhood, which will at once supply the consultant desirous of selecting the place most suited to his patient's condition with all the information he requires. Such statistics of past years as are found to be reliable will be published in the first volume. These, with the reports of each month's climate, will render the files of the REVIEW invaluable to any one interested in climatology. Any epidemic or outbreak of contageous diseases reported to the health officer will find a place in our columns, as we do not intend to praise only, but also condemn, if the occasion arises.

Asheville, appreciating her destiny as a great health resort, has done vastly more than the majority of her neighbors in taking care of her sanitary condition. In the past few years she has adopted and built a very complete system of sewerage and has erected a pumping station on the Swannanoa river, where a very pure water supply exists. The position of health officer has recently been created, and Dr. H. B. Weaver appointed. With his efficient services in this capacity, the outlook for the future sanitary condition of the city is reassuring, and never has been better than at the present time.

Every community of medical men should support a medical journal, in which local events, often of great importance to the profession, can be chronicled and discussed freely; in which the proceedings of local societies can be found; and through whose pages practitioners may learn of the worth and ability of their neighbors. The Buncombe County Medical Society has already endorsed these sentiments, as it has made the REVIEW its official organ.

It shall be the aim of the editors to make the REVIEW

a welcome visitor to the tables of the profession, and its column shall at all times be open to a discussion of matters of general interest.

We are indebted to the North Carolina *Medical Journal* for much of our brief report of the 37th annual meeting of the State Society in last May, and think a great of credit is due that journal for the industry it has shown in getting out the transactions in such good shape so early and including them within its cover pages.

Prof. W. W. Dawson, M. D. LL. D. The second degree was conferred upon Prof. Dawson at the last commencement of the Fort Wayne College, and few imen who have thus been honored have deserved it as much as has this great teacher of surgery. Professor Dawson has been a member of the profession for almost forty years, and for thirty years has been in the foremost rank of the surgeons of the entire country. For twenty years he has taught didactic and clinical surgery in Cincinnati's leading medical institution—the Medical College of Ohio—and in all of these years not one of the thousands who have graduated there but who have a warm place in their heart for him, and are not only better physicians, but also better men through his influence.

The medical profession testified to his worth by making him President of the American Medical Association two years ago.

His most important contribution to science was the publication of a new symptom, pathognomonic of backward dislocation of the hip; i. e. shorteuing when the thighs are bent at right angles to the plevis, which was simultaneously published by a Philadelphia surgeon.

The Mississippi Valley Medical Association will meet in Louisville, Ky., Oct. 8th, 9th and 10th. Dr. J. A. Wyeth, New York, will deliver the address.

The annual meeting of the American Climatological Association will be held in Denver, Sept. 2d, 3d and 4th. Dr. Karl Von Ruck will represent Asheville at the meeting.

New York State has secured the most stringent law of any of the States in regard to the study and practice of medicine. The necessity for cheap doctors exists no longer, except possibly in the wildest parts of the West, and State after State is protecting its people from the inroads upon their health and pocket-books which the unqualified doctor and blustering quack have been making with brazen effrontery. Since the masses can not learn to discriminate for themselves, it is but just and right that some restrictions of this sort should be imposed for their own good. These regulations, too, are a great kindness to many who would otherwise study medicine. As long as there are no such obstacles many enter into the contest for professional success, without the proper training and without the means to obtain it. Only a very small per cent. of such can succeed, competing as they must with men prepared by years of preliminary study and post graduate instruction. Those who can not avail themselves of these opportunities must learn by their mistakes, very costly ones often to the communities in which they live, before they become reliable counsellors in health or disease. Although at times inconvenient and often irksome, we say let the good work go on. Such measures elevate the standard of the profession and can but be hailed with joy by every respectable member of it.

The Winyah Sanitarium for diseases of the lungs and throat is being enlarged and remodeled, 27 new rooms added to the south wing a new kitchen, elevator, electric light, painting all walls, and extensive improvement upon the grounds, are additional features, all of which are to be complete by October 1st.

The painting and varnishing of walls and ceilings in sleeping rooms is to be especially commended as it is

done with a view to allow of more thorough washing and disinfection of the entire rooms, from time to time. Dr. Von Ruck expects to retain the Winyah Sanitarium, especially for such as are so ill that they need the care and supervision only posiable for institutions to give and has leased it for 10 years, in addition to his fine Hotel of 130 rooms at Sulphur Springs, which is rapidly nearing completion.

EXCHANGES.

Character of Commendations of Dioviburnia.

Editorial of I. N. Love, M. D., Professor of Diseases of Children, Marion-Sims College of Medicine, and Editor of the "Medical Mirror."

The subject of uterine disease reminds me that during the past six months I have had my attention drawn to a remedy which goes under the name of Dioviburnia, the formula of which is given by the proprietors, it being composed of equal parts of the fluid extracts of viburnum prunifolium, viburnum opulus, dioscorea villosa, aletris farinosa, helonias dioica, mitchella repens, caulophyllum thalictroides, scutellaria lateriflora, (each fluid ounce contains ¾ dram each of the fluid extract.)

The proper dose is, for adults, from a dessert to a tablespoonful three times daily after meals.

In urgent cases with much pain it should be given every hour or two in a half glass of hot water. I am free to say that with the exception of the "black haw" (a most valuable remedy) I was not familiar with the component parts of the Dioviburnia, but having read the emphatic endorsement by Drs. J. B. Johnson and L. Ch. Boisliniere, of St. Louis, two of the most eminent professors and practitioners of the city, as well as that of Dr. H. Tuholske, I was induced to give the compound, a fair and thorough trial, and I am convinced that in Dioviburnia we have a valuable addition to our armamentarium in our battle against the enemies of the noblest work of God—Woman.

METEOROLOGICAL.

BY KARL VON RUCK, M. D., ASHEVILLE, N. C.

In responding to the request of the editors of this Journal to supply it regularly with the report and other data from the Signal Service Station under my charge, it is my intention to add from time to time such other information as to Asheville's climatic condition which I consider of interest to the profession, and especially to members, who send patients to this locality for climatic benefit.

The tables published herewith show first the meteorological condition for last year's season corresponding with the present, in a summary of the six months from May to October 1889, and second, the past month of July, a detailed account of all observation made.

The recollection of the unusual hot weather observed elsewhere must be sufficiently fresh in the minds of many readers, and a reference to our table for July must cause a feeling of regret in those who have not been able to enjoy with us a month which in temperature, humidity, wind, rainfall and ozone, has been very fine; there having been no hot weather whatever in a sense to be oppressive or enervating. Although the maximnm temperature has been upon several occasions well up in the eighties, the state of humidity accompanying has always been very low, and except when directly exposed to the sun's rays, temperature of a number of degrees more, could have been born without discomfort as long as the air was relatively dry.

The gentle mountain breeze, with which nature has fanned this plateau during the entire part of almost every day this summer has been stimulating and refreshing, and the cool nights free from annoyance of musquitoes have been a comfort unspeakable, there having been not a single one this or last summer, when light covering in from of a single woolen blanket could be dispensed with.

Such weather has been highly favorable to invalids, who have been on the whole largely benefited under condition of weather, where refreshing sleep, good appetite and digestion, and pleasantly comfortable days have been the rule.

Summary of Meteorological Observations

MADE AT

THE UNITED STATES SIGNAL SERVICE STATION, WINYAH SANITARIUM, ASHEVILLE, N. C.

Elevation above Sea, 2,350 feet. Latitude 35.36 N. Longitude 82.26 W. Hours of Observation, 7 A. M., 2 P. M., and 9 P. M.

Self-registering maximum and minimum thermometers. Instruments exposed in standard U. S. Signal Service Shelter. Barometric reductions for altitude and temperature at 32°F averages about 2.5 inches. Ozone observations after method of Negretti and Zambra.

SEASON.	MONTH.	Mean Temperature.	Mean Max. Temperature.	Absolute Max. Temp.	Mean Min. Temp.	Absolute Min. Temp.	Mean Daily Range Temp.	Mean Daily Variation Temp.	Mean Relative Humidity.	Mean Asolute Humidity. (Grains moisture per cubic foot air.)	Mean Barometer corrected for Altitude and Temp.	Mean Amount Ozone (per cent. of possible 100.)	Total Amount of Rain and Melted Snow, in Inches.	No. Days on which 0.01 or more Rain fell.	Snow Fall in Inches.	No. Clear and Fair Days.	No. Cloudy and Rainy Days.	No. Days without Sunshine.
Summer of 1889.	May	62 58	75 58	89 90	49 80	30 30	25 78	5 46	80 15	3 713	30 10	40 0	5 47	10	0	25	6	0
	June	67 21	78 88	89 90	57 39	36 90	21 49	2 70	72 99	5 415	30 16	46 0	4 77	19	0	21	8	1
	July	72 74	82 65	91 30	64 55	57 40	18 10	1 76	74 96	6 561	30 12	45 0	4 39	12	0	24	7	1
	August	68 85	78 51	88 20	60 03	49 80	18 48	4 40	76 68	5 901	30 21	41 0	5 81	13	0	23	8	1
	September	63 90	73 82	82 30	54 40	35 90	19 42	2 80	73 24	4 924	30 17	42 0	4 28	11	0	27	3	0
	October	52 29	65 54	77 90	39 81	27 20	25 73	7 83	67 89	3 013	30 18	50 0	0 49	4	0	26	5	1
	Total	387 57	454 98	514 50	325 98	239 50	129 00	24 95	425 91	29 527	180 94	264 0	25 21	69	0	1 46	37	4
	Mean for Summer Months	64 59	75 83	85 73	54 33	39 92	21 50	4 16	70 98	4 921	30 16	44 0	4 20	11 50	0	2 43	6 16	0 67

KARL von RUCK, B. S., M. D., Director of Observatory.

C. P. AMBLER, M. D., Observer.

Summary of Meteorological Observations for July, '90.

	7 A. M.	2 P. M.	9 P. M.	DAILY MEAN.
Monthly mean Temperature	66.17	76.89	70.00	70.78
Relative Humidity	84.22	57.45	73.90	71.85
Absolute Humidity	5.957	5.706	5.895	5.860
Barometer (Reduced to sea level at 32°)	30.17	30.10	30.14	30.14

Maximum Temperature	88.05.	Mean	81.09
Minimum Temperature	55.05.	Mean	62.23
Mean Monthly Range Temperature	18.76.		
Mean Daily Variation Temperature	2.51.		

No. of clear days, 15. No. of fair days, 13. No. of cloudy and rainy days, 3. Ozone—Per cent. of possible 100—Mean for July, 31.61 per cent.

KARL von RUCK, B. S., M. D., Director of Observatory.
C. P. AMBLER, Observer.

BOOK REVIEWS.

A new Medical Dictionary, by George M. Gould, A.B., M.D., Ophthalmic Surgeon to the Philadelphia Hospital, Clinical Chief Ophthalmological Department German Hospital, Philadelphia.

Including all the words and phrases used in medicine, with their proper pronunciation and definition. Based on recent medical literature, containing elaborate tables of the Bacilli, Micrococci, Lucomaines, Ptomaines, etc.; of the Arteries, Ganglia, Muscles, Nerves and Plexuses; of weights and measures, thermometers, etc.; and Appendices containing classified tables with analyses, of the waters of the mineral springs of the United States., and tables of vital statistics.

Philadelphia: P. Blakiston, Son & Co. 1890.

A volume of some 500 small octavo pages, upon which the printer and binder have done their best work in giving to the student a book at once easily handled and read without effort. Within its small compass is a mass of information whose condensation has cost the author an immense amount of hard work, of which he truly says it would not have been half the labor to make a volume double or treble the size.

In his preface the author states that the following purposes have been kept steadily in view; to include those new words and phrases created during the past ten years; and every one knows into how many new branches scientific medicine has been divided within the last decade; to frame all definitions by the direct aid of new standard and authoritative text-books instead of copying old vocabularies; to omit obsolete words; and lastly, to make a volume that will answer the needs of the medical student and busy practitioner.

The author has adhered to these purposes throughout and the result is a book that will make itself useful to every one and indispensible to many. The biological tables contain useful hints, but not much more. In fact,

it is impossible in such a space to embody more than hints. The same is true of the chemical, anatomical and physiological tables. They, however, serve their purpose, and a glance at them will recall to the student, grown a little rusty in any one of the departments, just the necessary train of thought to help him out of an anatomical or other dilemma.

Every beginner in medicine should buy this dictionary and group around it his anotomy, physiology, etc., until the working library of the student has accumulated on his shelves, and from the first month on his dictionary will be called daily more and more into requisition, and even in later years he will still find it invaluable.

H. L. T.

An epitome of Tripler's Manual and other publications on the examination of Recruits, by Chas. R. Greenleaf, Major and Surgeon, U. S. A., Washington, D. C., William Ballantyne & Sons, 1890.

For a medical man to write a manual for information of a lay officer is a hard task, but Dr. Greenleaf has succeeded in so doing and at the same time does not detract from the medical value of his book. This epitome was written for the direction of officers of the army on recruiting service, to enable them to examine applicants for admission to the army, when a regular surgeon is not present, and is approved of and adopted by the War Department.

The examination required is very rigid, but the instructions given by Dr. Greenleaf make it very plain to an ordinary reader. The general qualifications requires a man to be in good condition, clean, well built and sober. The army is not an inebriate asylum, and it is ever suggested that a man may be rejected justifiably for having his breath tainted with alcohol, the habit of drinking having been denied.

Evidences of maturity are given for detection of entries of false age.

The comparative tables of height, weight and chest

measurement are of some interest to the medical reader.

The army requires a far higher proportion of height, weight and chest measurements than is required by any Insurance company, though it might be generally thought otherwise; but in the army the possibilities of severe hardships must be taken into consideration and requires an absolutely healthy organism.

For each inch of height from 5 feet 4 inches to 5 feet 7 inches inclusive, there should be 2 pounds of weight, and the chest at expiration should measure one half inch more than half the height over 5 feet 7 inches, for weight calculate 2 pounds for every inch and add 5 pounds additional for every inch over 5 feet 7 inches, and for chest measurement the expiration should be half the height, except for those over 5 feet 11 inches, when a fraction less than half the height may be allowed.

The chest mobility to be at least 2 inches when the height is less than 5 feet 7 inches, and 2½ inches when over that. Not much variation is allowed from these proportions except in candidates for and graduates from West Point.

All motions and movements of the limbs are required to be gone through, and a thorough examination of the skin, thoracic and abdominal organs, and of the entire system, is made. At the end of the book a table is made for medical officers of disqualifications requiring rejection of applicants. It would be of great service to the local Pension Examining Boards if the Interior Department would get out a manual as thorough as this, and it would lessen the cost of unnecessary re-examinations of applicants for pensions. Candidates for West Point, the Medical corps of the army or for commissions in the line would do well to obtain this manual, as they will then know what examinations they will have to stand and so, in case of a disqualification, may save the expense and unnecessary trip to the place of examination.

With this manual before them the family physician could make an examination and be qualified to express an opinion as to physical qualifications. F. T. M.

THE ASHEVILLE

Medical Review.

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ORIGINAL ARTICLES.

A CHAPTER OF RECTAL SURGERY.

H. LONGSTREET TAYLOR, A. M., M. D.

Formerly, Professor of Surgery, Cincinnati Polyclinic; Surgeon to the German Protestant Hospital, and to the Home for the Friendless and Foundlings, Cincinnati.

Operations upon the rectum are among the most satisfactory in regard to results obtained and rapid and complete healing, that the surgeon is called upon to make.

To the large blood supply is this result mainly attributable, but also to the perfected technique, which the masters in this branch of surgery have taught us. Here, as everywhere else, a careful diagnosis is of paramount importance, and if a patient says that he is suffering with piles we may find anything from a fissure, to a cancer occupying the entire lower segment of the rectum. The diagnosis "piles" is, like "pelvic disease" or "pelvic abscess," to be regarded as very indefinite, but unfortunately in no class of cases more than the rectal diseases is the practitioner apt to accept the patient's description of his symptoms and to act on the diagnosis thus made without a careful physical exploration. I have had this experience so often that I feel justified in stating once more what almost every book upon this subject contains, and in once more insisting upon the absolute necessity of a good light, and upon an ocular, digital, and instrumental examination before making a diagnosis even of apparently simple cases. With a careful, methodical

exploration conducted in this manner a correct diagnosis can usually be established and the proper treatment can then be instituted.

The examination of a patient suffering with fistula should be particularly careful, to determine whether it be blind (external or internal variety) or complete; whether one or more communications with the bowel exist, whether it be of the simple or horse-shoe variety, and to recognize or exclude other pathological conditions. Having made the diagnosis, the question of treatment next arises.

Should any time be lost in attempting to cure fistula without the use of the knife, when the patient's constitutional condition does not contra-indicate operation? It is true that cases have healed spontaneously, and have been cured by topical applications, but in very many cases where the result has apparently been secured, it has proven illusory. Most patients are desirous of being cured as quickly and as thoroughly as possible, and therefore I prefer to take no chance of a failure, but always advise an operation, and that, preferably, with the knife or scissors, and not the ligature. The annoyances attendant upon a division of the rectal sphincters are but temporary, and a rapid and painless convalescence is not consistent with active and irritated sphincters. In fact, when the sphincters are not freely divided the healing process is apt to be prolonged, uncertain, and attended with more pain than when the division has been complete.

A very strong argument for the use of the knife is that no one can tell before laying open an old fistula how far it may extend. This is readily understood when the character of the tissue filling the ischio-rectal fossa is taken into consideration, and to what a slight extent it is capable of resisting the advance of destructive inflammation. As the almost universal cause, or at least forerunner of fistula is abscess, we may find cul-de-sacs leading in every direction from the tract. The most common situation for a diverticulum of this character is along the rectal wall, above the opening into the bowel. There

is very good authority, as shown by such names as Brodie, Quinn, and Henry Smith, for allowing these side tracts to take care of themselves, especially the pocket that is so apt to be found above the internal opening, but Allingham says most positively, and Cripps agrees with him, that he has seen a number of cases in which a second operation was necessary because the surgeon had neglected to lay open this part of the fistula. If this is the case, it is certainly more thorough surgery to take no risks, and open every pocket and sinus that can be found. In a case in which I did not make this radical operation, the internal opening was very far up the bowel, and any hæmorrhage from an additional incision would have been difficult to control, the cure was only temporary, and something over a year later the patient was operated upon by another surgeon.

If there is any objection to leaving these lateral culde-sacs to themselves, the ligature should be discarded, as from the method of its application it can not go higher than the opening into the bowel, and it leaves us in ignorance of the presence of any lateral sinus.

There are cases in which the external opening is so far from the rectum that the ligature could not be drawn tight enough the first time to cut through entirely. In a case upon which I operated the internal opening was situated upon the lateral wall about three-quarters of an inch from the muco cutaneous border, and the external opening was in the vulva. There an elastic ligature could not have been so effectual, and would have caused much more suffering than the free incision did. This patient had been treated for years with injections, cauterizations of the tract, dilitation, etc., but was well in a few weeks after the operation. The hard, indurated tissues around the fistula could be readily traced with the finger across the perineum. This hardness disappears as granulation advances, but in old cases makes any hope of spontaneous cure an impossibility, and successfully defies any other than radical measures.

The after treatment is of the greatest importance, al-

though simple. Immediately after the operation secure any vessel that requires a ligature, and then carefully and methodically pack every irregularity and depression with lint. A large pad of cotton and a T bandage complete the dressing. This packing prevents hæmorrhage and renders a too prompt union of any part of the incision impossible. Recurrent hæmorrhage in this part of the body, where it is, as a rule, parenchymatous in character, is very annoying to say the least. In one case in which the anæsthetic had been withdrawn, and the packing was consequently very painful, I allowed my sympathies to over-rule my judgment and did not pack an extensive incision with the requisite care. Patient and surgeon both recognized the error when it became necessary to resort to hot water and repacking some hours later. The amount of blood lost before the nurse was aware of any bleeding was very considerable. The dressing becomes loosened up after the second or third day, when the wound should be cleansed and repacked. The second and subsequent dressings do not require the care that the first one does. A simple strip of gauze, carefully adapted to the bottom of the wound, suffices. If the healing is unsatisfactory or slow, examine again for any tract which may have escaped notice at the operation. If none can be found, stimulate the granulations with nitrate of silver, change the character of the dressing, etc.

If the patient should be found to be a victim of hæmorrhoids the treatment, of course, varies with the variety. One with external hæmorrhoids usually calls for help only when an acute inflammation sets in. Then, ordinarily, a small incision through which a clot is readily expressed, gives him relief. But occasionally these attacks of inflammation are more serious and are attended with a great deal of pain and some febrile reaction. Under these circumstances local depletion, such as can most readily be secured by applying half a dozen leeches followed by hot applications, will produce a great change. Then, after the inflammation has sub-

sided, transfix the enlarged hæmorrhoid with a sharp abscess knife and see that every particle of the clot is removed. All attempts to secure local anæthesia in inflamed hæmorrhoids that I have ever made have been failures. Injections of cocaine produce toxic symptoms, but scarcely appreciable local anæsthesia. Ether spray is very irritating in its after effects and ineffectual.—Leeching, followed by hot applications, reduces the external sensitiveness and the patient can then have the necessary incision made without anæsthesia. The only rule prescribed by custom is to make all incisions in the direction of the cutaneous folds, but I have never seen bad results follow when I have made the incision in the long axis of the tumor, thereby insuring the complete removal of the clot with less manipulation.

Internal hæmorrhoids are not so readily disposed of. By palliative measures, an individual who takes the greatest care of himself may live with tolerable comfort for years, but is at any time liable to an attack of inflammation and suffering. In aggravated cases every one knows how much these unfortunate individuals suffer. One patient upon whom I operated was in the habit of sending for his physician to give him a hypodermic injection of morphine after every stool.

The treatment varies with the degree and character o the disease. The injection plan, which has been so highly praised by eminent men, prominent among whom stands Van Buren, and just as loudly condemned by others, is certainly useful, but I doubt if it equals the ligature in thoroughness and satisfactory results. In mild cases it may be used in preference to giving an anæsthetic and dilating the sphincters, but when a number of tumors are present I prefer to have the patient anæsthitized, stretch the sphincters and ligate according to Allingham's very explicit and simple description of the operation that he brought to such perfection. In very bad cases, when the dilated vessels have completely encircled the rectum, Whitehead's operation finds a place. I performed this operation in a most aggravated case,

and the result was all that could be desired. As this last operation is of more recent date than the others referred to, it may not be amiss to describe it in a few words. After dilating the sphincters an incision is made entirely around the rectum at the muco-cutaneous border, and the lower end of the rectal mucous membrane, with the dilated blood vessels, is dissected from the deeper coats of the bowel. This circular dissection is readily made with blunt instruments and is carried up the bowel above the tumors. When the dissection has been satisfactorily completed, the loosened part is drawn down and cut off with the scissors. This amputation is done step by step, and as it is cut through the stump is sutured to the skin. Several ligatures will be found necessary as the amputation progresses. As in this class of cases there is considerable prolapse, shortening the canal is a decided gain.

The clamp and cautery I have used but once. The patient suffered much more than is usual after the use of the ligature, neither was the result as satisfactory.

My plan of treatment now is to inject where the case is but slight, and to use the ligature except in very bad cases when Whitehead's operation promises more permanent relief.

Effects and Treatment of One of the Forms of Cervical Stenosis.*

By John H. Williams, M. D., Asheville, N. C.

Etiology.—In taking up the subject which I have the honor to present to you to-day, I am aware that I shall have to go over a much traveled road and enter upon the consideration of a much hackneyed subject, and one that has caused much controversy and a great deal of mental profanity—strictly professional, of course. It is one of the "Bete Noires" of our profession. Stenosis of the cervix in its many forms presents a large field, both in its

*Read before the Buncombe County, N. C., Medical Society.

causation and its effects. To properly consider the matter, and for the sake of convenience, I shall have to adopt a classification of my own, and consider at least three varieties:

1st. The purely mechanical—produced by prononnced flexures. 2d. The pseudo or spasmodic—neurotic in origin—and lastly that which I term the cicatricial. I shall only give a passing space at the two first forms of my classification.

The first or mechanical is most frequently met with in the virgin uterus and is, in a majority of cases, congenital. It is a true stenosis, produced by flexure—either anterior or posterior. It is most marked in the posterior form. I will, I presume, be called to task for describing this occlusion of the cervical canal as a stenosis. Yet I must contend that it is as much a stenosis as any form known to the gynecologist. Its effect as one of the causative factors in the production of dysmenorrhea is marked and unmistakable. The consideration of this form is of more special interest with reference to the dysmenorrhea. If you will take a piece of rubber tubing and bend it sharply at right angles or even less, you will have a very plain demonstration of the way in which it is produced. This form is one which is rarely, if ever, seen in the multi-para, and then only when the fundus has been jamed down into the pelvic cavity by cellular effusion and retained by adhesive bands.

The second or spasmodic form, is as I have classified it—one of the neuroses that deserves a more extended notice than can be given in this article, with so large a field to cover. In my paper, as originally designed to be read before this body, I thought to treat of this form more at length, but the full consideration of this one form alone, with all its protean aspects, would require more time and space than would be just and right to inflict upon you, and, besides, you know that a divinely inspired man once said, "Oh, that mine enemy would write a book." Well, I don't propose to do it.

The third form to which I shall pay more especial at-

tention, I have designated as the cicatricial. I do not know that I can better designate it. In my opinion, which is one shared by a large number of our leading gynecologists, it is due, primarily, to a chronic catarrh of the cervical mucous membrane, neglected and confirmed by repeated acute catarrhal attacks. The subacute inflammatory condition gradually extends to the deeper structures with corresponding deposit of plastic matter.

The inevitable tendency of unabsorbed and unremoved plastic effusion is the organization of inodular tissue with resultant contraction. This contraction may or may not be symmetrical and may become one of the factors in the various flexures of the organ. This may occur from the arrangement of the muscular fibres, and the larger amount of firm connective tissue as compared with the body, which go to make up the larger part of the cervix uteri. The arrangement of these fibres was formerly erroneously described as parallel bundles of muscular fibres encircling the cervix, constituting a regular sphincter. This is an error, though a small majority of the fibres do take this course. The general arrangement of the muscular fibres of the cervix partakes very generally of the character of the arrangement of those of the body of the uterus proper—an inextricable interlacing and interweaving of the muscular fibres so as to constitute a regular net-work.

The importance of this arrangement will more especially appear in noticing the etiology of the various flexures.

I shall have only time to devote a passing glance at the two first classifications and pass on to the consideration of the third or cicatricial form. The physician is only called upon to treat the case after the mischief has been done. As I have before remarked, the origin is generally clouded in obscurity. A slight cold contracted about the time of the menstrual flux, over-exertion in an unnatural or constrained position, as in long hours at the sewing machine—an invention of the devil, by the

way, and in the direct interest of the gynecologist. No especial attention is given to the matter. It is just a little cold with a little pain in the back, a little heaviness in the iliac or pubic region. It passes off, leaving a slight catarrhal leucorrhœa. It is nothing. But the next menstrual period is accompanied by the same symptoms, possibly slightly exaggerated. The seed has been sown in fertile soil; the months run by; the slight inflammatory action digs its way deeper and deeper into the tissues. The condition of engorgment is greater, the pain is more pronounced. Effusion of lymph into the cellular trabecula of the organ has taken place. The inevitable contraction sets in and you have your beautiful case of stenosis. The dysmenorrhœa that obtains in this case is not purely mechanical. The organ in question is not all muscle and blood vessels. No one organ in the economy is more sentient or more highly endowed with nerves. It is a vast net-work of nerves derived mainly from the ganglionic or great sympathetic system. It is a blind nerve, and like a blind man when irritated, strikes out blindly, and the explosion may take place in some distant part of the body.

The neurosis now becomes more strongly marked and the trouble may partake very largely of the second class —that of the neurotic type. The pain in this type is characteristic and always comes in paroxysms.

Colicky pains shoot through the abdomen and through the Obturator and down the great Sciatic nerves with cramps in all the muscles by them supplied. The picture is not overdrawn. Many or all of you have had just such cases. If my experience in dealing with such cases will be of benefit to the members of the society, I shall feel amply repaid for what thought and study I may have given this matter.

In speaking of the treatment of Stenosis in whatever form it may occur it will be necessary to go over a great deal that has already been written and promulgated from the rostrum. I shall briefly review this and give the results as well of my own study and experience. I

shall not weary you by a repetition of statistics from my cases but endeavor to make a practical application of such facts as I have observed.

In treating cases of the first class it is evident that by straightening the organ you restore the lumen of the canal as you would by straightening the piece of rubber tubing. I have but little faith in the various forms of pessaries and none at all in the so-called stem pessary. It is an exceedingly dangerous instrument even in the most skilled hands.

I should rely more upon the cotton or woolen tampons applied in the Sim's position with the constant use of the hot water douche to keep down the irritation consequent upon the altered relation of the parts. I should have premised by saying that almost all of the flexures are accompanied by corresponding version. For the relief of the dysmenorrhœa accompanying sharp flexures some one of the cutting operations has found most favor —Simpson's operation of cutting through the convexity of the flexure has probably met with more favor than any other till of late years. The operation is dangerous by reason of the fact that at the point of flexure the tissues have become condensed and thinned by the long continued pressure, and you may have a mere shell to cut through thereby endangering the integrity of the peritoneum or the peri-uterine cellular tissues. Lennekers brochure on the subject of primary retroflexion of the virgin uterus offers an operation to which I am especially inclined—with a curved or scymeter shaped knife with a guarded beak make three or four parallel cuts from ¼ to 3–16 inch in depth on the concave surface of the cervix. The lumen of the canal is at once increased and the resulting contraction of the cicatricial tissue in the line of the incisions gradually but surely brings the organ up to the normal position with the result that the dysmenorrhœa is removed. The process of gradual dilatation will in some cases prove of benefit. The process of rapid dilatation as advocated by Goodell has been applied to the relief of such cases. In a great

many the temporary relief has been great but the risks of the operation and the almost certainty of a return are so great that the operation finds no favor in my eyes.

The treatment of the second form is so entirely dependent upon the peculiar nervous condition of the individual, and is so much influenced by the environment of the patient and is beset with so many difficulties that I shall make no attempt to discuss the matter in this paper.

In the treatment of the last or cicatricial form, the mechanical finds full sway. Operative interference in these cases produces the most brilliant results, for the time being at least. The advocates of the different modes of incisions and dilatation, find their adherents by the score, and the warfare between the opposing factions has waged fiercely for years. It has been my good or bad fortune to have seen some of these cases after they had passed from the clinic room, and from under the hands of these brilliant operators.

I am firmly convinced that a major proportion of those treated by the process of rapid dilatation ultimately relapse into a condition seven times worse than before. The process of rapid dilatation must, necessarily, be accompanied by the rupture of muscular fibres and the dense connective tissue, made more dense by the old deposits of inodular tissue. The result must, of necessity, be that a new inflammatory action takes place with fresh deposits of plastic matter and a larger amount of inodular tissue with resultant contraction. Should the laceration of the tissues proceed to such an extent as to involve the delicate mucous membrane of the cervix and os externum. You have a much more deplorable condition of affairs. Under the most favorable circumstances it is a well-known fact that nature finds great difficulty in repairing lacerations of the cervix, produced in what we may call a normal manner *i. e.* in parturition. Such being the case how much more difficult must be her task when she undertakes to repair an injury under such circumstances. The tissues are already in an unhealthy con-

dition, loaded down with the products of prior inflammatory action, and with the newly and partly found epithelium constantly bathed in the unhealthy secretions from depraved and vitiated glands. The result, in a number of cases, has been that nature in her endeavor to repair the injury, crowds the tissues with cells that from their unhealthy environment and imperfect formation have nothing left to do but die. And the result is a death of a part and a rapid proliferation of the remainder, and the grand total stands before you in an unconquerable epithelioma. I am backed in such an opinion, and to my mind, such an inevitable conclusion, by one no less than the incomparable Emmett.

With the treatment by discission I have had but little experience, and have had no opportunity to follow these cases after they have left the operator's hands. I leave the defense of this mode of treatment to its advocates.

My case book shows that I have had a total number of seventeen cases under my treatment for the last or cicatricial form of stenosis. I have been able to observe and follow these cases for periods ranging from two to twelve years from the time they left my hands. The majority of these cases were in married women and all were sterile. The results have to me proved eminently satisfactory, and I may say, to my patients as well. The treatment I have long used in such cases is not wholly my own but I do think I can claim priority in at least a part of the treatment adopted. To not weary you I will be as brief as possible in my description, and give as succintly as I can my reasons for the treatment.

I put my patient in the dorsal or Sims' position—the latter preferred. I then seize with a tenaculum the cervix and by slight traction straighten it as much as possible. I then introduce as gently as possible the beak of smallest Ellinger dilator until I have passed the internal os. It is important that this should be done as gently as possible, since I have found in all these cases the internal os is unusually sensitive, resulting in spasmodic muscular contractions, and again, the canal is apt to be un-

usually long and if care is not exercised the beak of the instrument will not pass the internal os at all. I then begin by gentle pressnre on the handles of the instrument to dilate the entire canal till my patient exclaims that she can bear no more. I do this without any anæsthetic whatever; I do not even nse cocaine. I desire that my patient shonld be in full possession of all her sentient faculties. By so doing I am sure that I will do no harm. I retain my grasp upon the handles of the dilator for a minute or two, and then gently relax and withdraw the instrnment. I then dip a delicate applicator wrapped with a small pledget of cotton into the well-known "Battey's Solution," or iodized phenol. I carry this through the entire cervical canal, and if I find a large amount of the viscid secretion from the glands of Naboth, I repeat it until I am sure that the mucous membrane has been thoroughly coated.

I then release my patient and require her to lay in a recumbent position for at least two hours. After several treatments have been made the sensitiveness of the tissues will be markedly lessened and the patient need not be confined so long. My reason for using the dilator in this manner is that I put the tissues simply upon the stretch, thereby momentarily increasing their vascularity, stopping far short of the inflammatory point. By using the carbolized iodine I get first the anæsthetic and sedative action of the carbolic acid upon the sensitive and hyperæsthetic nervous tissne and its alterative action upon the mucous membrane with underlying glands, and secondly, I get the absorbent effect of the iodine upon the old and hardened deposits of plastic matter which have just been awakened by the application of the dilator. I will repeat this operation every third or fourth day, gradually gaining upon the lumen of the canal until it is easy to pass a No. 14 to No. 20 (American scale) catheter or bougie.

The attention to the ordinary hygiene of the body goes without saying. In all these cases I have found a tendency to a constipated habit. The very best composi-

tion I have found to relieve this may be embodied in the following prescription:

Hyd. bi-chlor.	grs. $\frac{\cdot\cdot}{ii}$.
Ext. nuc. vom.	grs. $\frac{\cdot\cdot\cdot}{viii}$.
Ext. hyosciam,	grs. $\frac{\cdot\cdot}{xii}$.
Ext. taraxaca,	grs. $\frac{\cdot}{xxiv}$.

M. ft. pill, No. $\frac{\cdot\cdot\cdot}{xxiv}$. Sig. one pill after each meal, pro re nata.

I like especially the combination of the bi-chloride on account of its well-known absorbent action. One would reason *pari passu* that the iodide of potassium would answer well in such cases. Theoretically possibly; clinically I have not found it of any benefit.

It is an old saying, gentlemen, that nothing succeeds like success. I have every reason to be satisfied with the treatment herein set forth. There is nothing brilliant in this mode of treatment, and you will have to wait sometimes weary months to see the full fruition of all your hopes. But for the patient it has the advantage. It does not cause her to relinquish her household duties, but on the contrary, the steady improvement in her condition has given her almost from the very first a new hopefulness and a new interest in all that surrounds her.

MEETINGS OF SOCIETIES.

PROCEEDINGS OF THE RANDOLPH COUNTY MEDICAL SOCIETY.

The Randolph county Medical Society held its regular meeting in Asheboro, Aug. 21, 1890, Dr. C. H. Lewis, president, in the chair, and Dr. J. B. Douglass secretary.

Dr. Chas. Daligny presented a negro man about fifty years of age, with a large epitheloma of penis.

Dr. Daligny also made some remarks highly eulogistic on the action of "Cupri Arseni" in the treatment of diarrhœa, dysentery, and bowel affections generally. Favorable remarks upon its use in these affections were also made by Drs. W. A. Woolen and J. W. Long—the latter, however, reported some failures as well as cures by its use.

Dr. J. W. Long presented a case of Intubation instruments and demonstrated their use. He made interesting remarks favoring intubation in preference to tracheotomy.

Dr. J. B. Douglass reported fifteen cases of typhoid fever, with four deaths—one from intestinal hemorrhage and three from heart failure. The latter three cases were young ladies, sisters and operators in a cotton mill, and were just convalescing from severe attacks of measles. One of these cases had retention of urine and catheter had to be used for nearly two weeks before death. All but of two these cases were using water from the same spring.

Dr. J. W. Long reported a case which he had seen in consultation, of a lady with typhoid fever, advanced in pregnancy three months. Patient aborted, complicated with placenta prævia lateralis. On examination a putrid mass was found protruding from the uterus, which showed the foetus to have been dead for some time. He curetted the uterus and used antiseptic irrigations, and at last accounts the patient was doing well.

The president reported the case of a lady seventy years

old, who had been wearing a glass pessary for twenty-five years which had slipped into the uterus, and the os closed upon it. When called to the case the pessary had been in the uterus two weeks. He dilated the os with finger and improvised a hook out of a bucket bail and extracted it.

Drs. Caddell and Dowd also presented cases of interest.

Drs. Douglass and Boyette were appointed to read papers at the next regular meeting of the Society.

It was moved and unanimously carried that the secretary report proceedings of the Society to the Asheville Medical Review. The Society then adjourned to meet in Asheboro the third Thursday in November, 1890, at 11 o'clock.

NORTH CAROLINA STATE MEDICAL SOCIETY.

The meeting of the North Carolina State Medical Society in Asheville next May promises to be one of the most successful in the history of the society. The physicians and citizens have determined to make it a memoriable event as far as it lies within their power to do so, and distinguished members of the profession from a distance have signified their intention of being present.

The Buncombe County Medical Society appointed the following local committee to make all necessary arrangements for the meeting:

Dr. H. M. Fletcher, president Buncombe county Medical Society, chairman; Drs. S. W. Battle, Charles E. Hilliard, H. Longstreet Taylor, W. P. Whittington and Major W. E. Breese, president of the First National Bank of Asheville; Charles D. Blanton. Esq., Mayor of the city of Asheville, and J. S. Grant, Ph. G., secretary.

The committee met and organized as above, and in order to facilitate the transactions of their business appointed the following sub-committees; the chairmen of the sub-committees to be members of the general committee, but to have the power to increase their number from outsiders.

These sub-committees are as as follows: First on registration, second on location and accommodations, third on entertainment, fourth on hall, fifth on printing, sixth on exhibitions, seventh on transportation and eighth on finance.

Every member of the Society should come as a good time will certainly be provided by the citizens of Asheville, who have established a reputation for their hospitality to conventions, a number of which assemble here yearly, and nothing is left undone by them which can in any way contribute to the comfort and enjoyment of their guests.

PROCEEDINGS OF THE BUNCOMBE COUNTY MEDICAL SOCIETY, SEP. 1, 1890.

The Buncombe Co. Medical Society met on Monday, Sept. 1, at 8:30 p. m., in Dr. J. A. Burrough's office, Dr. H. M. Fletcher in the chair. In the absence of Dr. Watson, Dr. Whittington was made secretary pro tem.

Dr. Weaver moved that a committee be appointed to confer with the solicitor in regards to illegal practitioners, which motion was carried and the following committee appointed: Drs. Reagan, Weaver, and Whittington.

Dr. Battle, the essayist for the evening, not being present no paper was read.

Dr. J. A. Reagan reported a case of Bright's disease in which he was called in connection with Dr. Hardwick, of Marshall, N. C. They used nitro-glycerine in 1–200 grain doses, three times a day, and the patient was discharged as cured.

Patient had "La Grippe" and the kidney trouble returned, from which he finally died.

Dr. J. A. Burroughs presented a case of Epithelionia of the lip, that he was treating with arsenic.

Dr. Fletcher insisted upon the futility of such treatment and suggested an operation to include fully the diseased tissue.

The society then adjourned to meet October 5, 1890, in Dr. Whittington's office. Dr. J. A. Burroughs will read a paper upon "Typhoid Fever in Patients over 50 years of age."

There were present at the meeting Drs. M. H. Fletcher, H. B. Weaver, J. A. Burroughs, J. A. Reagan, W. P. Whittington, A. S. Whittaker, and Dr. Arrington (by invitation).

THE METRIC SYSTEM.

We welcome the entrance of the metric system as the only legal and sensible system of weights and measures. The Convention for the seventh decennial revision of the United States Pharmacopœia endorsed the metric system, and by a large majority resolved that the next edition of the Pharmacopœia should have weights and measures expressed in the metric system exclusively. The International Photographers Congress, the National Association of Builders, the American Institute of Architects, the American Society of Civil Engineers and the American Society of Microscopists have endorsed it, and it now remains only for the American Medical Association to do likewise to have it generally adopted by the profession. Many good practitioners, undoubtedly, are opposed to such innovation, but the only objection they have to offer is that it will require study and time to become accustomed to thinking in and writing prescriptions by this system. They may go on using the apothecaries weights, but the young men of the profession should accept at once this system, and in a short time the apothecaries system would die out and be forgotten. Not only would we have an universal system of prescribing, but the liability to mistakes would be lessened. Errors often

occur in mistaking the Roman letter V or X, or *vice versa*, and in not distinguishing the symbols as now used, but with this new system only two denominations are used. The tables for conversion of the customary weights to the metric system is easy, and the only difficulty to be met with is that of thinking in this system. Constant use of the gram, decigram, centigram and milligram will soon make us wonder why we used the old, and soon to be obsolete, system so long.

In writing prescriptions a vertical line should be drawn after writing the names of the drugs we wish to prescribe, and then by writing the grams on the left hand side, and the deci centi and the milligrams on the right, as you would decimals it soon becomes an easy matter. A gram is 15½ grains, a liter makes a quart or 1,000 grams, or 1,000 cubic centimeters, or 1 kilo, and 1,000 kilos make a ton. Every denomination is divisible by tens, thus making the decimal system come handy—no fraction being required. All Boards of Examiners in medicine and pharmacy should require a knowledge of the metric system, and colleges should adopt its use in lectures upon Materia Medica and Therapeutics. We trust that before the present decade has passed that this system will be adopted by the medical profession, for Congress legalized the Metric System in 1886. A physician may now write his prescription in this system, and he could accuse his druggist of ignorance if it was not filled. Let us take it up at once and be in the van.

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H. Longstreet Taylor, A. M. M. D., } Editors and Publishers.

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EDITORIAL.

The Southern Surgical and Gynecological Association will meet in Atlanta, Ga., November 11, 12 and 13. An interesting program is promised.

The Tri-State Medical Association, of Alabama, Georgia and Tennessee, will hold its annual meeting in Chattanooga October 19, 20 and 21, 1890.

The report of the second Hyderabad Commission in favor of chloroform as opposed to ether as an anæsthetic will we found in part condensed on another page of the Review. This commission, composed of Surgeon-Major Lawrie, Rustomje Hokim, Drs. C. Bomford and T. Lauder Brunton, who associated with themselves the members of the first Commission, Dr. Helier, Messrs. Kelly and Chamarrette, in its report recommends chloroform as a safe anæsthetic, and their opinion must have

a great deal of weight, even though opposed by the Commission of the British Medical Association, composed of Anstie, Ringer, Richardson, Gosselin and Vulpian.

American Public Health Association. The eighth annual meeting of the American Public Health Association will be held at Charleston, S. C., December 16 to 19, 1890.

The executive committee have selected the following todics for consideration: 1. Sanitary Construction in House Architecture; 2. Sewage Disposal; 3. Maritime Sanitation at Ports of Arrival; 4. The Prevention and Restriction of Tuberculosis; 5. Isolation Hospitals for Infectious and Contagious Diseases; 6. Establishments in Favorable Climates for Persons having Tuberculous Predispositions; 7. Papers on Miscellaneous Sanitary and Hygienic Subjects.

All communications relating to local matters should be addressed to H. B. Horlbeck, M. D., chairman local committee of arrangements, Charleston, S. C.

Blank applications for membership can be obtained by addressing the secretary, Irving A. Watson, M. D., Concord, N. H.

The Mississippi Valley Medical Association will hold its 16th annual session at Louisville, Ky., Oct. 8, 9 and 10, 1890. An unusually interesting meeting is expected. An address is to be delivered by Dr. John A. Wyeth of New York, and a paper to be read by Dr. Frank Woodbury of Philadelphia. The profession of the Valley is very well represented on the program. Among them are such names as Reamy, Whittaker, Ransohoff, Cincinnati; Sutton, Pittsburgh; Scott, Corlett, Vance and Baker of Cleveland; Lydston, Chicago; Ray, Louisville; Love, St. Louis; King, Kansas City, and many others. The social arrangements for the meeting are perfect. Louisville knows how to entertain Special effort will be made to render pleasant the visit of ladies who accompany the physicians. It is to be hoped that a large number of

ladies will be present. The time of the association is given up strictly to scientific work; all medical politics are relegated to committees. Science by day and a good time by night is the watchword. President, Dr. J. M. Matthews, Louisville; secretary, Dr. E. S. McKee, Cincinnati.

The American Rhinological Association will meet in Louisville Oct. 6, 7 and 8, 1890, and will give gentlemen the opportunity to attend both meetings. No one certainly will regret a visit to Louisville.

Post Graduate Instruction. Ten years ago it was impossible for the practitioner desirous of studying the practical side of his profession to find just what he desired in his native country. In Vienna and Paris such opportunities have long been offered and every year a number of ambitious young physicians made their way to these seats of learning. So general was the demand for equal opportunities here for those whose means would not allow them to cross the waters, that the two schools in New York opened their doors to graduates. Post graduate schools began appear all over the country and the good they have accomplished in giving the young graduate the opportunity of learning how to examine patients and how to use instruments employed by the specialists, and which he would otherwise probably have never attempted to use, has been very great. The necessity for these schools exists on account of the preponderance of theoretic and almost total absence of the practical teaching in the large medical colleges. It is impossible for classes of a hundred to two, and three times that number, to be individually drilled in the use of instruments of precission in the short time given them to cram down their medical education. To the majority the theoretical is all sufficient and they go forth and learn the practical part at the cost of their first patients. But there is always a small per cent. of the ambitious young

men who are desirous of going into the race fully equipped to meet all emergencies.

Among these schools one was founded at Cincinnati and its Second Annual Announcement is at hand. From it we see a faculty representing all branches of medicine and surgery, and numbering twenty-four names; among them such men as S. C. Ayres, last president of the Ophthalmological sections of the American Medical Association; C. A. L. Reed, president-elect of the Gynecological sections of the same association; R. B. Hall, whose report of twenty-eight abdominal operations without a death at the last meeting of the Ohio State Society, has attracted such wide-spread attention; W. H. Long, of the U. S. Marine Hospital Service, who has done such excellent work on the subject of the radical cure of hernia, and others equally as prominent.

Clinical instruction is given in ten hospitals besides the large polyclinic dispensary, where the record shows a monthly attendance of 2000 patients. Cincinnati is so readily accessible from the South that anyone thinking of availing himself of the advantages of a post graduate course should inform himself of the opportunities there offered. It is at No. 534 Race street.

EXCHANGES, TRANSLATIONS AND SELECTIONS.

WHERE THE OBLIGATION LIES.

Of so much importance is the enforcement of hygienic laws, rules and regulations, that it should be carried out to the letter. As a general thing, cities adopt such sanitary regulations as experience and science have determined to be the best. They of necessity are made general, and in their nature demand obedience from each individual. The nature of preventable diseases is such that they permit no exception to the general laws by which prevention is secured. The obligation of the general and thorough enforcement of these laws extends to the entire community as a whole, and to each individual as a part. It may be that a city in general is in a good sanitary condition, while a few habitations may, by their unsanitary condition, invite disease to the extent of an epidemic. On the other hand, a few habitations may be in a good sanitary condition, and, through the general unsanitary condition of the city be exposed to all the ills that breed in the slums of filth and neglect. There is no line to be drawn as to where sanitation should begin and where end. It must be complete in order to serve the ends for which it is established. Our streets and front yards may be inviting, refreshing and clean, and yet from the alleys and rear grounds may come the infection of disease and death. Cases are on record where an epidemic of typhoid fever has resulted from the polluted water in a single well. Diphtheria and scarlet fever have spread from a single case of neglected disinfection. And thus it is throughout the province of sanitary science. Preventive measures must be thorough and minute. The streets and the alleys, the garret and the basement, all must be subject to the general law. The failure to provide this is often found in a lack of proper inspection. In some cities no provisions for in-

spection is made. In others it is instituted, but is not thorough on account of too few inspectors. Proper inspection cannot be made on the run. It takes time as well as skill. There is not a city in this country that is inspected as it should be, simply because the chief of these departments is not provided with the quantity and quality of inspectors necessary. In can be seen, both in State and municipal government, that money will be spent freely for almost everything except for the promotion of health, when, if the matter were rightly considered, it would be found that more money expended for the benefit of the public health would necessitate the expenditure of less in many other directions.

A proper regard for sanitary regulations cannot be expected from the general public, for their importance is not generally understood. Their enforcement must depend upon the officials having such matters in charge, and those officials cannot fully discharge the duties of their office unless they have the means the great labor demands. Improvements in streets, drives, parks, and all that, is well enough, but the greatest improvement springs from improved health. Yet we must acknowledge that the money spent for this purpose is all out of proportion to that spent for other purposes. The truth is, the blessings of hygiene must be forced upon some people, and this must be done through the direction of State and municipal government.—*Sanitary News.*

AMERICAN PHYSICIANS.

Prof. Virchow of Berlin, in conversation with a reporter recently regarding the Medical Congress, said:

"You come to see me concerning the Medical Congress. It is well that America is looking after the event, for, as I remarked to a friend, the congress is to be a kind of love feast after the hostilities and fighting factions of the American medical world, which began hostilities at the Congress in Washington some time ago. The war has been kept up ever since. Dr. Jacob says the hatchet

is now buried. This must be true, for he was one of the strikers at the Washington Congress. It is hoped that he is not mistaken, for the Americans are a proud, able lot of men, who will accomplish almost anything if they only work in harmony.

"The Congress has only one great purpose, namely, to demonstrate to physicians that they must learn more to fulfill their duty to humanity. This constant progress makes a distinction between the modern physician on the one hand and the old fogy doctor on the other, or between the scientist and the Philadelphia adventurer. For my part I would like to see this as the only weapon used in fighting the pseudo physician who, by the way have greatly decreased in number during the last ten years, since the physicians formed an association and engaged lawyers to protect their interest in America.

"I am glad to hear that the Philadelphia doctor is played out, and truly there is no spot on earth where science, combined with honesty, does not find it hard work to cope with arrogance and humbug. I set great hopes on the lasting success of these congresses, because they erect an insurmountable barrier between the scientific medical man and the class like the advanced chiropodist, who describes himself as a professor.

"We in Germany have great admiration for the American medical world. The American medical books were translated into Germany as far back as the latter part of the eighteenth century. Not so many American medical books are translated now because the German physician finds it necessary to study English in order to live up to the requirement of his profession. The American medical world to-day excels in surgery, midwifery and dentistry. What the Germans know about dentistry they learned from America. America has also splendid oculists, but it would prove greatly to the interests of the American people if they had a man of the knowledge of Dr. Knapp of New York in every big city.

"Over there the people are so rich that they could well afford to check the increase of eye diseases among the

growing generation by making good physicians for this special disease. I can say for myself and colleagues that the American contingent at this congress will be honored and heartily welcomed.

"My German students generally spend a few summers thinking about what line of medicine they shall follow, while the American student walks into the arena with a fixed purpose and an indomitable determination to accomplish it. This is why your men secure their laurels before their hair turns gray.

"My friend, Dr. Horatio Wood of New York, will be the speaker for the Americans at the coming congress. He is sure to do himself and the great city and country from which he comes high credit. It has been the one great wish of my life to visit America, but I see little chance of realizing it. If I go I must stay two years to finish."—*Sanitary News.*

CHLOROFORM.

Surgeon-Major Lawrie on the "Second Report of the Hyderabad Chloroform Commission," in the *London Lancet*, says:

The Commission has demonstrated that the aim of the surgeon must be to give chloroform so that the blood pressure should fall regularly throughout the whole administration, and that the blood-pressure can only be kept from irregularities by absolute regularity of breathing. The chloroform must, therefore, be inhaled in such a way that the breathing is natural and regular throughout. Feeling the pulse during chloroform inhalation is no guide whatever either to the blood-pressure or to the one thing necessary for safety, which is to keep it regular; and it has been shown above that the pulse is of no value as a sign of approaching danger, since it is only affected dangerously when respiration has been interfered with or by an overdose. Lastly, in order to keep the breathing regular, the whole of the administrator's attention must be concentrated upon this point alone; and it is therefore clear that if, as is now recommended in

most of the text books, part of the chloroformist's attention is to be given to the pulse, an important element of danger comes into the administration.

We can no longer contend, with regard to chloroform, that the results of clinical experience and of experimental research do not agree. The investigations of the Hyderabad Commission have brought to light a strikingly precise and complete agreement between both. I have stated in the *Lancet* of April 5, 1890, that the late Mr. Syme's and my own form a continuous series amounting to more than 45,000 cases of almost daily chloroform administration, extending from 1847 to 1890, in which the respiration alone was taken as a guide, without one death resulting. Mr. Roger Williams has proved in the *Lancet* of February 8, 1890, from the statistics of one of the largest hospitals in London (which, he says, may be accepted as reliable averages of all the London hospitals), in which the pulse is taken as a guide, and is carefully watched as well as the respiration, that the deaths amount to one in every 1,236 administrations. We thus see that in a long series of 45,000 cases, extending over forty years, in which the chloroformist's attention was concentrated on the respiration alone, and in which the chloroformists were students, there were no deaths at all, while in another series of 12,268 cases, in which a part of the chloroformist's attention was devoted to the pulse, and in which the chloroformists were specialists (anæsthetists), there were no less than ten deaths—a fraction over one in every 1,250 administrations. The clinical results correspond with the conclusions arrived at by the Hyderabad Commission, and are sufficient to show what a tremendous difference to patients the mere method of administration may make. One of the London journals, the *St. James Gazette*, recently published an article on the question, "Is Chloroform Safe?" and answered it by saying, "It depends upon who gives it." We now know that it does indeed depend upon who gives it, but we also know that any intelligent third or fourth years' medical student may be trained to give it safely, so as to do good without the risk of evil.

I think that I have shown that the Hyderabad Commisson has proved Syme's principles to be true. The *rationale* of the proof and the keystone to the work of the Second Commission is to be found in the discovery of the safeguard action of the vagus nerve, and in the thorough comprehension of the significance of this fact. As soon as this was demonstrated it became clear that chloroform and shock were not associates, but incompatibles, and that the supposed capricious action of chloroform upon the heart was due either to the stimulating effect or concentrated vapor upon the nervous system, or to the effect of asphyxical blood upon the nerve centers, resulting in the exclusion of the poison from the system, and not the direct effect of the absorbed poison upon the heart or its nerves.—*Southern Practitioner.*

The Present Status of the Operations of Intestinal Anastomosis and Enterorrhaphy, and the Comparative Merits of the Various "Aids" that have been Recently Suggested in the Performance of these Operations.

BY RUDOLPH MATAS, M. D.,

Visiting Surgeon Charity Hospital; Demonstrator of Anatomy, Medical Department of Tulane University of Louisiana; Instructor in Operative and Clinical Surgery, New Orleans Polyclinic, etc.

Dr. Matas has in an exhaustive manner gone over this very interesting subject in the August number of the New Orleans *Medical and Surgical Journal*, and we can but refer the reader to it who is desirous of informing himself fully on all that has been done in this new field. We subjoin the author's description of the ring proposed by himself, but of which he says:

"While the various substitutes, Abbe's, Brokaw's, Davis's, and the author's, can be successfully substituted for the decalcified bone plate, the latter is the preferable material, the others being regarded in the light of *suc-*

cedanea, to be remembered in emergencies and special conditions."

The ring which is exhibited in the collection before you is the same as the one which Dr. Paul Michinard and myself have tried quite extensively in the experiments on dogs which we have jointly conducted during the last few months. It is quite different from the ring originally presented to the Louisiana State Medical Society last year. While it is made of the same "drum snare" material, it differs from it very essentially in the fact that I now employ the catgut after it has been boiled, and, consequently, the tendency to kink and twist which characterizes the original twisted material is permanently and effectually removed. At the time when I first demonstrated the *technique* of circular enterorraphy and of anastomosis, with the aid of these rings, before the State Society, I had only experimented with the rings on the cadaver, and had not had occasion to observe the effect which prolonged immersion of the thick catgut in a watery medium has in disfiguring the rings. For this reason, I am much indebted to Brokaw for this criticism with which he summarily disposed of the ring and put it, metaphorically, *hors de combat*. This criticism led me to experiment and study considerably the hygroscopic properties of catgut, and on the conditions which modify them. In order to prevent the absorption of water, I tried the effects of preparatory saturation with various fixed and volatile oils, of varnishes, such as damar, copal and gutta-percha; these simply retarded absorption, but in the end totally failed to prevent it, and with the failure came the inevitable coiling and distorting kink or twist; a tanning process was tried, chromicizing, etc., but all this failed, until I resorted, finally, to the simplest expedient which is always effective with thread-catgut, and that was, to boil the gut in water until it had completely uncoiled itself and had absorbed water to the fullest extent of its hygroscopic capacity. This result, much to my satisfaction, was accomplished by a very few minutes' immersion in boiling water, when

the gut swells to three times its original diameter and is reduced to one-third its original length. Thus three feet of drum snare will, after two or three minutes' boiling, contract to one foot; and the cord which originally was about 3½ millimeters in diameter will swell to 6 millimeters. After this result is obtained, the gut will remain permanently shortened, but will dry very rapidly and become as hard as wood. It may be then immersed indefinitely in water and it will simply soften to the consistence of a solid rubber band, but will never show a disposition to become distorted by kinking or coiling. With a material thus prepared it is easy to make rings of any desired size by simply cutting and shaping them; furthermore, they are made to retain their shape by simply inserting the free ends in a small piece of rubber tubing, which, acting as as a clasp, is sufficient to keep the ring in shape; in order to secure the tubing permanently it will be safer to tie the ring to the tubing with silk thread. The ring is then ready to be mounted with the fundamental or preforating sutures, which should consist of four threads six or eight inches long, each holding a round milliner's needle of convenient size, and tied at equidistant points on the circle. When the ring is to be used it should be placed in a towel previously wrung out of a hot carbolized or aseptic solution, in which it will rapidly soften and swell to its maximum dimensions, and in this condition will be made to slip easily through a comparatively narrow slit in the intestine. It is preferable to use the ring soft because it then has attained its maximum hygrosocopic diameter and there is no risk of subsequent swelling within the intestine; furthermore, while soft and of a rubber-like consistence, it is still sufficiently resisting to secure the ready coaption of the opposed serous surfaces. When thus softened, a large ring can also be used to secure coaption after partial enterectomies of the intestinal convexity for multiple gunshot wounds, as Brokaw first suggested; though it appears to me that the application of aids in these cases is, if not superfluous, at least not essential.

While studying the hygroscopic condition of catgut, I discovered that the only kind of heavy catgut that will stand boiling without disintegrating or spoiling, is the cheapest (five cents per foot) catgut first recommended by me, *i. e.*, the crude commercial drum snares used for tightening drums, and not the heavy gut strings used for the bass violin, which Brokaw and others have erroneously regarded as identical with the above. The finer varieties of gut which are used as bass or violin strings are subjected to a sort of waxing process which totally unfits them for boiling, by disintegrating and making totally worthless for any purpose. Not knowing this peculiarity I recommended them in my first paper, owing to their apparent similarity to snare material, but since I have discovered my error I withdraw my recommendation and would warn those who should be tempted to try them, against their use.

Having thus modified my original ring, I believe that the objections against it have been removed, and the experimental evidence that I have secured in the operations performed by Dr. Michinard and myself proves that they can be used as effectively as any of the catgut substitutes of the Senn bone plate. We have used this ring twice in gastro-enterostomy after pylorectomy; once in entero-enterostomy; once in ileo-colostomy; once in circular enterorrhaphy after colectomy, and once in circular enterorrhaphy after enterectomy."

He concludes this very valuable paper as follows:

In the preceding propositions and accompanying remarks much has been said which is doubtless well known to the investigator and special reader who is *au fait* in all the details and developments of intestinal surgery. But the new art or school of aided enterrorrhaphy, which has been founded by the imperishable labors of Senn, has not yet celebrated its fourth anniversary, so that it can scarcely be called old. The modern rapid "aided" method is quickly superseding the old; in this country and in England no progressive surgeon could admit his ignorance of the methods without blushing. In conser-

vative Europe it is otherwise, though a crisis is impend-pending which will end in a reaction that will be equivalent to a revival in continental methods of intestinal surgery. In the meantime, the work is ever progressing and the finale has not been reached; new indications, modifications and details in the technique must be perfected before they finally crystallize; hence the work of the reviewer who surveys the field, confirms or rejects the modification and methods, is still in order, as his work serves to strengthen and diffuse progress, if only by the ventilation of the most advanced ideas and results. This has been the aim of the author, and he will be amply satisfied if his efforts have aided in accomplishing this last result.

MASSAGE IN GYNÆCOLOGY.

In the second of two lectures delivered by Prof. F. Vulliet at the Polyclinic of Geneva the use of massage in certain diseases of the female pelvis is fully treated. Directions are first given as to how to perform massage of the pelvis, and after massage an intra-uterine douche of a tepid corrosive sublimate solution, if there is reason to believe that the tube is involved, is recommended. In cases of retro-uterine adhesions, the indurated and thickened tissues are first softened and then finally entirely absorbed by the proper use of massage. In cases of peri-uterine hæmatocele, dilated uterus, prolapsus uteri, etc., massage is recommended to be tried, not as a specific, but as a very useful adjunct to other therapeutic means.

The use of massage also developes and perfects tactile acuteness, and is an excellent school for studying the bimannual method of examination.—*Annals of Gynæcology and Pediatry.*

A NEW STORAGE BATTERY.

The use of electricity in treatment of various diseases has become so general that it is of interest to all that Dr. J. M. Ray, of Louisville, Ky., has devised and had

made for him a storage battery for galvano-cautery and electro-motive work. It consists of a storage battery of three cells arranged in a cabinet with ordinary gravity blue stone cells for generating electricity. The rheostat and switches are placed so as to be easily accessible and the gravity cells may be cut off in the day time, and only kept working at nights. The cabinet is nicely finished and is an attractive piece of office furniture.—*The American Practitioner and News.*

In the August number of the *Southern Medical Record* is the report of a case of gun-shot wound of the abdomen, with abdominal sections and sections of the intestines, reported by Dr. A. S. Whitaker, of Biltmore. We are pleased to note that the able surgery of Drs. Whitaker and Williams met with a successful termination, the patient being discharged in fifteen days cured. Chloroform was used as the anæsthetic.

BLOODLESS AMPUTATION AT HIP JOINT.

Dr. J. A. Wyeth, of New York, has devised a method of preventing hemorrhage in amputation of the hip joint, which bids fair to take the place of the classical operation, and even the operations of Trendelenburg and Forneau Jourdan. The method suggested is as follows;

An Esmarch bandage is applied in the usual manner, from the foot to the upper end of the femur, and fastened in position. The point of a steel mattress needle 3-16th of an inch in diameter and a foot long, is then inserted an inch and a-half below the anterior superior spinous process of the ilium and slightly to the inside of it and traversing the muscles and deep fascia, passing between the great trochanter and the iliac spine, extending to the neck of the femur, through the tensor vaginæ femoris muscle, and made to emerge just back of the trochanter major. The tissues should conceal about four inches of the needle. A second needle is then entered an inch below the crotch, internal to the saphenous opening and

passing through the adductors of the thigh, made to come out an inch and a-half in front of the tuber ischii. The ends of the needles are protected by corks. A piece of white rubber tubing, half an inch in diameter and long enough to go around the thigh six or seven times, is now wound around the limb above the needles and drawn very tight and then firmly tied.

The Esmarch bandage is now removed and five inches below the tubing a circular incision is made. The skin and subcutaneous tissue is dissected back in a cuff to the level of the lesser trochanter, at which level the muscles and vessels are divided squarely and the bone sawed off. All vessels, including the veins, are tied with cat-gut, and the tourniquet is then removed.

The remaining portion of the femur is then enucleated by dividing the attachments of the muscles close to the bone and opening the capsule as soon as it is reached. On lifting the end of the bone in the direction of the umbilicus and dividing the cotyloid ligament posteriorly, the air enters the cavity of the acetabulum and facilitates the division of the ligamentum teres.

The closure of the wound follows, and drainage tubes may be inserted. Antisepsis is required for the proper results. One other advantage this operation has over any suggested before is that it may be done in two sittings.

In a case in which shock is great, and the operator thinks it best, after dividing the bone and tying the vessels, the wound may be sutured, and afterwards, at a convenient time, the remaining portion of the femur may be removed by an incision over the great trochanter.

Drs. W. F. Fluhrer and Chas. McBurney, at the Mt. Sinai and Roosevelt hospitals respectively, have each done one operation by this method, and together with Dr. Wyeth's two operations they make four brilliant successes, all recovering.—*International Journal of Surgery.*

GUN-SHOT WOUNDS OF THE ABDOMEN.

Drs. Aug. Schachner and Ap. Morgan Vance have recently reported some very interesting facts in regard to penetrating gun-shot wounds of the abdomen. They made forty-five experiments on animals in Lonisville, Ky., and reached the following deductions:

Of thirty-two penetrating wounds of the abdomen which were operated upon the mortality amounted to 45.1 per cent., while in five that were not interfered with the mortality was 80 per cent. They also made four resections after Wolfer's method—a partial resection of the liver, a partial resection of the spleen, and one experiment upon the peritoneum—all ending in recovery.

In view of the uncertainty which attends these injuries, exploratory laparotomy should be performed in every case, boldly but carefully. The operator should be in readiness to meet and indication that the case may demand.

Laparotomy in the linea albea is preferable to one in the track of the ball unless there are reasons to believe that the ball has stopped short of the peritoneum, or that its track is infected, in which case incision and drainage should be empl yed.

Considering the objections against Senn's test as a diagnostic means of determining the necessity of a laparotomy, the possible harm outweighs to such an extent the possible benefit that its general adoption is hardly justifiable.

The value of Senn's method in determining at the close of the operation the security of the intestinal tract is questionable and still *sub judice*.

Large intestinal wounds not involving the mesenteric border are best treated by partial resection.

Intestinal wounds upon the mesenteric border, unless very small, require complete resection.

Where several large wounds are situated very close together a single resection including them all should be considered.

Partial resections of the liver, spleen or pancreas are possible and may be required.

Suturing of both openings in the wounds of the liver and spleen for the arrest of hæmorrhage is advisable.

Excepting superficial lesions nephrectomy is the only procedure in wounds of the kidney .

Should obscure symptoms arise, pointing to an early peritonitis, the use of salines is indicated.

If suppurative peritonitis is established, early exploratory incision, drainage and disinfection of the peritoneum should be undertaken.—*Annals of Surgery.*

METEOROLOGICAL.

Editors Asheville Medical Review:

I herewith enclose the summary of last month's observations of the Signal Service Station, and also the table showing all the observations made last winter. The latter will be particularly interesting to the professon in view of the coming winter season, as giving them an idea of what their patients are likely to find whom they may contemplate sending to Asheville. As to conditions of temperature observed last winter, and which as well as other date, correspond with but slight variations to observations of previous winters, nothing could be more desirable—the mean temperature being 49° F., the mean maximum 60° F., and the unpublished records of the station show that during the middle of the day there were but few exceptions to the rule, that patients could be out of doors from four to six hours without the need of heavy over garments for protection. The relative humidity averaging 64.60 for all hours of the day, shows an average of less than fifty between 9 and 5 o'clock, and it is not likely that a drier air than this indicates is even desirable. An average of twenty-four clear and fair days for all the winter months, with an average of but one day on which there was no sunshine, prove the great amount of out of door life here possible in an atmosphere con-

taining ozone to an average of 51.64 per cent. of the possible amount.

With the increasing facilities that are here for the care and entertainment of winter guests, the strong medical faculty of our city, and the constant improvement of our measures for security and maintenance of the public health, Asheville certainly offers as much if not more than any known health resort to the invalid who is still in a condition to be benefitted by the means at our command, and nothing is needed than a general knowledge by the profession, to make them appreciate Asheville's advantages in order to secure a patronage for the coming season, for which our increasing accommodations may, as last winter, prove inadequate.

KARL VON RUCK, M. D.

UNITED STATES SIGNAL SERVICE STATION,

WINYAH SANITARIUM, ASHEVILLE, N. C.

SUMMARY OF OBSERVATIONS FOR AUGUST, 1890.

(For the Asheville Medical Review.)

	7 A. M.	2 P. M.	9 P. M.	DAILY MEAN.
Monthly mean Temperature	62.23	75.58	66.93	67.91
Relative Humidity	88.87	55.19	77.25	73.44
Absolute Humidity	5.578	5.330	5.644	5.462
Barometer (Reduced to sea level at 32°)	30.22	30.14	30.17	30.17

Maximum Temperature	86.2.	Mean	78.31
Minimum Temperature	47.	Mean	59.29
Mean Monthly Range Temperature	18.02 F.		
Mean Daily Variation Temperature	2.48 F.		
Total Rainfall for Month	6.71 inches.		

No. of clear days, 21. No. of fair days, 6. No. of cloudy and rainy days, 4. Ozone—Per cent. of possible 100—Mean for the month, 35. per cent.

KARL VON RUCK, B. S., M. D.,
Director of Observatory.

C. P. AMBLER, M. D.,
Observer.

Summary of Meteorological Observations

MADE AT

THE UNITED STATES SIGNAL SERVICE STATION, WINYAH SANITARIUM, ASHEVILLE, N. C.

Elevation above Sea, 2,350 feet. Latitude 35.36 N. Longitude 82.26 W. Hours of Observation, 7 A. M., 2 P. M., and 9 P. M.

Self-registering maximum and minimum thermometers. Instruments exposed in standard U. S. Signal Service Shelter. Barometric reductions for altitude and temperature at 32°F. averages about 2.5 inches. Ozone observations after method of Negretti and Zambra.

SEASON.	MONTH.	Mean Temperature.	Mean Max. Temperature.	Absolute Max. Temp.	Mean Min. Temp.	Absolute Min. Temp.	Mean Daily Range Temp.	Mean Daily Variation Temp.	Mean Relative Humidity.	Mean Absolute Humidity. (Grains moisture per cubic foot air.)	Mean Barometer corrected for Altitude and Temp.	Mean Amount Ozone (per cent. of possible 100.)	Total Amount of Rain and Melted Snow, in Inches.	No. Days on which 0.01 or more Rain fell.	Snow Fall in Inches.	No. Clear and Fair Days.	No. Cloudy and Rainy Days.	No. Days without Sunshine.
Winter of 1889-1890.	November	45 26	55 41	72 50	37 03	14 90	17 38	4 98	71 12	2 650	30 21	54 33	4 72	15	1 60	22	7	2
	December	51 18	61 83	72 50	38 74	16 20	23 09	3 26	65 25	2 825	30 31	49 03	0 97	5	0	26	5	1
	January	47 22	57 63	71 40	36 09	15 80	21 54	6 65	63 81	2 525	30 38	58 44	1 42	6	trace	26	5	1
	February	48 95	59 79	72 80	38 42	22 50	21 36	5 16	63 39	2 811	30 22	56 07	5 30	13	trace	18	10	0
	March	42 65	53 44	71 50	32 55	11 00	20 90	8 84	60 77	2 150	30 21	53 55	2 50	11	1 65	34	7	1
	April	56 85	67 72	85 20	44 76	32 00	25 96	5 38	59 76	3 113	30 22	38 33	3 93	8	0	26	4	2
	Total	292 11	355 82	445 90	227 59	112 40	130 23	34 27	387 60	16 074	1 1 55	309 85	18 84	58	3 20	1 43	38	7
	Mean for Winter Months	48 96	59 30	74 32	37 93	18 74	21 70	5 71	64 60	2 679	30 26	51 64	3 14	9 67	0 53	23 83	6 33	1 17

KARL von RUCK, B. S., M. D., Director of Observatory.

C. P. AMBLER, M. D., Observer.

NOTES.

The following new members were admitted into the State Society in May, 1890:

Dr. J. B. Monro,	Dr. John W. Booth.
" T. L. Booth,	" John Sweany,
" J. S. Lafferty,	" W. G. Stofford,
" B. W. Hotboway,	" J. H. Marsh,
" L. A. Hanks,	" P. B. Loftin,
" A. L. Gibbon,	" W. A. Graham,
" R. B. Henderson,	" J. L. Ray,
" C. E. Hilliard,	" S. H. Kennedy.
" J. C. Kirkman,	" W. B. Crawford,
" J. L. Edgerton,	" I. G. Riddick,
" W. H. Cobb, Jr.,	" J. W. White,
" J. P. Tearington.	" E. G. Moore,
" J. J. Menn,	" P. R. Michaux,
" M. R. Barswell,	" B. Chears,
" I. M. Lynn,	" J. N. Pearce,
" J. A. Rogers,	" E. P. Snipes,
" E. C. Laird,	" R. A. Morton,
" R. D. Jewett.	

At a meeting of the Board of Examiners, May 24 to 31, 1890, licenses to practice were given to the following:

Dr. J. Strickland,	Castalia,	North Carolina.
" R. D. Ross,	Charlotte,	"
" R. E. Nichols,	Dayton,	"
" R. S. Primrose,	New Berne,	"
" D. T. Newborn,	Snow Hill,	"
" W. McAllister,	Millidgeville,	"
" J. C. Williamson,	Whiteville,	"
" A. D. Horah,	Salisbury,	"
" J. Spicer,	Goldsboro,	"
" J. J. Peacock,	Saratoga,	"
" A. O. Young,	Rogers Store,	"
" L. L. Sawyer,	Elizabeth City,	"
" R. E. Hinman,	Charlotte,	"

Dr. L. E. Norfleet,	Tarboro,	North Carolina.
" R. J. Teaque,	Alpha,	"
" C. C. Hubbard,	Wilkesboro,	"
" A. Mack,	Red Springs,	"
" L. L. Vann,	Winston,	"
" R. J. Nelson,	Bethel,	"
" W. A. Mayo,	"	"
" W. S. Windsor,	Cross Roads Ch., Yadkin Co.,	"
" J. B. Shamburger,	Asbury,	"
" C. P. Ambler,	Asheville,	"
" G. W. Kughlet, Jr.,	Washington,	"
" R. D. Jewett,	Wilmington,	"
" J. F. Sanderford,	Creedmoor,	"
" D. P. Whitley,	Big Lick,	"
" R. M. Reid,	Steel Creek,	"
" N. M. Blaylock,	Banks, Wake Co.	"
" C. H. Sexton,	Raleigh,	"
" J. Watts,	Taylorsville,	"
" Kenneth A. Blue,	Havty,	"
" D. W. Courts,	Reidsville,	"
" J. R. Jerome,	Mint Hill,	"
" W. E. Heeden,	Pittsboro,	"
" E. H. Bolling,	Luster,	"
" C. B. Hargrove,	Tarboro,	"
" D. J. Watson,	Southport,	"
" S. S. Flynt,	Rural Hill,	"
" J. C. Brodsher,	Olive Hill,	"
" J. A. Goddy,	Cedar Hill,	"
" D. E. Caldwell,	Chapel Hill,	"
" J. T. Bynum,	Germanton,	"
" M. W. Alston,	Lewisburg,	"
" P. N. Melchor,	Concord,	"
" C. L. Jenkins,	Tarboro,	"

We take pleasure in printing the following notice:

The Tri-State Medical Association will meet on the 2d Tuesday in October, 1890, in Chattanooga, Tennessee,

and the following is sent out by the Executive Committee:

At our first meeting sections of the various departments of the Medical Sciences were created, with the following chairmen:

Surgery—G. A. Baxter, Chattanooga.
Gynæcology—R. J. Trippe, Chattanooga.
Obstetries—W. T. Blackford, Graysville, Ga.
State Medicine—P. D. Sims, Chattanooga.
Physiology—W. L. Gahagan, Chattanooga.
Otology—R. D. Boyd, Chattanooga.
Ophthalmology—N. C. Steele, Chattanooga.
Laryngology—Max Thorner, Cincinnati, O.
Psychical Research—J. E. Pruden, Cullman, Ala.
Pathology and Practical Microscopy—James E. Reeves, Chattanooga.
Meteorology—E. T. Camp, Gadsden, Ala.
Practice—G. W. Drake, Chattanooga.
Materia Medica and New Remedies—Junius F. Lynch, Sanford, Fla.

Members of the Association are requested to report cases or other matters of interest to the chairmen of the various sections, who will report them at the next meeting.

The object of our Association are the encouragement of all that pertains to the elevation of the profession, and the furtherance of all measures for the relief of suffering. We aim to draw together those who respect ethical medicine for mutual acquaintance, for advancement in knowledge, and for stimulation to scientific investigation.

Our membership is not restricted to the three States, and all who can, should join us in the furtherance of the above objects. By furnishing proper credentials and remitting one dollar to the Secretary any physician may be enrolled as a member of this Association.

In due time a circular will be issued giving full particulars of our next meeting, but at present we feel war-

ranted in promising reduced rates on railroads and at the hotels.

The names of firms who apply for space to make exhibits of pharmaceutical preparations, surgical instruments or other articles, will be published in our next circular. We are already assured of a large number of exhibits.

DR. J. R. RATHMELL,
DR. W. C. TOWNES,
DR. W. L. GAHAGAN, } Ex. Com.

Address all communications to the Secretary of the Association.

The following are the officers of the Association:

President—Dr. J. B. Cowan, Tennessee.

Vice Presidents—Dr. Andrew Boyd, Alabama; Dr. James B. Edge, Georgia; Dr. Llewellyn P. Barber, Tennessee.

Secretary—Dr. Frank Trester Smith, Chattanooga, Tennessee.

Treasurer—Dr. B. S. Wert, Tennessee.

BOOK REVIEWS.

Massotherapeutics or Massage as a Mode of Treatment.

By William Murrell, M. D., F. R. C. P., Lecturer or Pharmacology and Therapeutics at the Westminster Hospital; formerly examiner in Materia Medica to the University of Edinburgh and the Royal College of Physicians of London. Fifth Edition. P. Blackiston & Co. Philadelphia. 1890.

In a nicely gotten-up book Dr. Murrell sets forth massage in the light of a science and fine art. He says, "By massotherapeutics I mean the scientific aspect of the subject Massage, that is simply as a therapeutic agent, and not massage as a means of earning a living or as a modified form of hotel keeping. Massage is an art, and as such must be acquired by study and practice under competent guidance."

He states that a massotherapeutist need not of necessity be a practical masseur; and the masseur on the other hand need have no real knowledge of massotherapeutics.

"There are of course hundreds of people who pretend that they practice massage; but as a matter of fact nine-tenths of them have never been properly trained and know nothing about it."

"The so-called massage practiced in some of the hospitals and under the auspices of some of the nursing institutions, is a painful exhibition of ignorance and incompetence, being simply a degenerate form of rubbing or shampooing."

He thinks that two years' time is not too long to learn the art and theory of massatherapy, and is quite hard upon some of our supposed masseurs. The work is written in a nice style and is very pleasant reading, as it is interjected all through by reports of cases from each of which something may be learned.

Upon the whole this is the most rational and by far the best treatise in English upon massage, or massotherapy, and should be in the hands of every nurse and of all physicians who may treat that class of cases which

are benefitted by massage. These are of necessity limited, and only those diseases are treated of in the work which may be benefitted or cured. Explicit directions are given for the performance of massage, and of each kind of massage, and by means of excellent illustrations they are made plain.

The binding and printing of the book is excellent, as is usual with these publishers.

F. T. M.

PAMPHLETS RECEIVED.

CHOLECYSTOTOMY. By Edward Ricketts, M. D.

EXTERNAL SURGERY OF THE NOSE. By B. Merrill Ricketts, M. D.

THE USE AND ABUSE OF SOAP AND WATER. By B. Merrill Ricketts, M. D.

CIRCUMCISION. By E. R. Palmer, M. D., Louisville, K. Y. (*Reprint from Medical News.*)

REPORT OF A CASE OF CHOLECYSTOTOMY, with exhibition of specimens. By Rufus B. Hall, M. D.

WHAT IS THE PRESENT MEDICO—LEGAL STATUS OF THE ABDOMINAL SURGEON? By W. W. Potter, M. D.

THE THERAPEUTIC VALUE OF ELECTRICITY IN GYNECOLOGY. By A. H. Goelet, M. D. (*Reprint from Medical News.*)

Proceedings of the First Annual Meeting of the Tri-State Medical Association, held in Chattanooga, Tenn., October 15 and 16, 1889.

CASES OF SUCCESSFUL OPERATION FOR BULBO—MEMBRANOUS CLOSE STRICTURE BY INTERNAL URETHROTOMY. By E. R. Palmer, M. D., Louisville, Ky.

MENSTRUATION AND REMOVAL OF BOTH OVARIES. By Geo. J. Engelmann, M. D., St. Louis, Mo. (*Reprint from Transactions of Southern Surg and Gyn. Association, 1889.*)

RENAL DISEASE FOLLOWING UTERO-OVARIAN LESIONS. By Geo. J. Engelmann, M. D., St. Louis, Mo. (*Reprint from Transactions of the American Gynecological Society, 1889.*)

TREATMENT OF POST-PARTUM HÆMORRHAGE. By Geo. J. Engle. mann, M. D., St. Louis, Mo. (*Reprint from Transactions of the Southern Illinois Med. Association, 1880.*)

ELECTRICITY IN GYNECOLOGY. By C. D. Rockwell, M. D.; A, H Goelet, M. D.; Franklin H. Martin, M. D.; E. L. H. McGinniss, M. D.; A. H. Buckmaster, M. D.; A. Lapthorn Smith, M. D.; G. Betton, Massey, M. D., and Alexander J. C. Skene, M. D. (*Reprint from the Medical News*).

DIOVIBURNIA

UTERINE TONIC. ANTISPASMODIC AND ANODYNE.

A reliable and trustworthy remedy for the relief of Dysmenorrhœa, Amenorrhœa, Menorrhagia, Leucorrhœa, Subinvolution, Threatened Abortion, Vomiting in Pregnancy and Chlorosis; directing its action to the entire uterine system as a general tonic and antispasmodic.

DIOVIBURNIA is prepared for prescribing exclusively, and the formula will commend itself to every intelligent physician.

FORMULA.

Every ounce contains ¼ dram each of the fluid extracts: Viburnum Prunifolium, Viburnum Opulus, Dioscorea Villosa, Aletris Farinosa, Helonias Diocia, Mitchella Repens, Caulophyllum Thalistroids, Scutellaria, Dateriflora.

DOSE.—For adults, a dessertspoonful to a tablespoonful three times a day, always in HOT WATER.

Jno. B. Johnson, M. D., Professor of the Principles and Practice of Medicine, St. Louis Medical College:

I very cheerfully give my testimony to the virtues of a combination of vegetable remedies prepared by a well-known and able pharmacist of this city, and known as DIOVIBURNIA, and therefore have no relation to proprietary or quack remedies. I have employed this medicine in cases of dysmenorrhœa, suppression of the catemenia, and in excessive leucorrhœa, and have been much pleased with its use. I do not think its claims (as set forth in the circular accompanying it) to be at all excessive. I recommend its use.

Jno. B. Johnson

L. Ch. Boisliniere M. D., Prof. Obstetrics, St. Louis Medical College:

I have given DIOVIBURNIA a fair trial and found it useful as an uterine tonic and anti-spasmodic, relieving the pains of dysmenorrhœa, and regulator of the uterine functions. I feel authorized to give this recommendation, as it is neither a patented nor a secret medicine, the formula of which having been communicated freely to the medical profession.

L. Ch. Boisliniere M.D.

H. Tuholski, M. D., Professor Clinical Surgery and Surgical Pathology, Missouri Medical College; also Post-Graduate School of St. Louis:

I have used DIOVIBURNIA quite a number of times—sufficiently frequently to satisfy myself of its merits. It is of unquestionable benefit in painful dysmenorrhœa.

H. Tuholski

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THE ASHEVILLE
Medical Review.

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ORIGINAL ARTICLES.

BRANCHIAL CLEFT IN DEEP EPITHELIOMA OF THE NECK.—REMOVAL.—NO RECURRENCE AFTER FOURTEEN WEEKS.

Charles Seth Evans, B.S., M. D., Surgeon to the German Protestant Hospital, Cincinnati, Ohio.

W. E. Female, age 20. Native of Bavaria, Germany. Born of healthy parents, resident of this country for two years.

Ten weeks ago had acute rheumatism—otherwise healthy; no affection of the heart. Noticed some five years ago an enlargement of the right side of the neck at about the level of the larynx; growth of the same was slow and painless, and in no way interfering with the acts of breathing or deglutition.

June 7, 1890. Presented herself for treatment at the German Protestant Hospital, Cincinnati, Ohio, giving the preceding history, stating that ten days before the swelling of the neck increased rapidly, accompanied by paid and tenderness, and fever. Ocular examination showed a well-developed and very well nourished German girl of medium statute, cheeks flushed, herpes upon the lips. Tongue large and coated. The right side of neck is considerably larger than the left; skin normal over the swelling, and the sterno-cleido-mastoid of that side being pushed forward and outward and evidently passing over the tumor. Head held to the right side as in mild case of *caput obstipum*. Movement of the head toward the left side limited and accompanied by pain.

The prominence of the larynx, which could be indistinctly seen, was pushed to the left of the median line of the neck. Phonation distinct and clear. Deglutition of fluids slightly painful; of hard articles of diet quite painful. A slight pulsation of the tumor was to be observed, and a more marked one was to be seen at the external border of the sterno-cleido-mastoid. Temp. 101.5.

On having the patient swallow there was a very distinct motion upwards, the tumor accompanying the larynx in its excursion.

No engorgement of the veins on that side of the neck could be observed. No heart symptoms or eye symptoms.

Palpation. Skin movable over the tumor. Sterno-cleido passes over the tumor and can be lifted up with the fingers; on the outer border of the same the pulsations of carotid artery can be very distinctly felt. The tumor itself has an estimated size of a goose egg and extended from the level of the upper border of the thyroid cartilage to the sterno-clavicular articulation; its lower limits could, however, not be well defined. Its largest diameter was opposite the cricoid cartilage—its smallest just above the sterno clavicular articulation. No thrill could be felt and expansile pulsation was not present. Consistency of the tumor varied; in its largest part it fluctuated, at other points it was solid.

The outline of the tumor was indistinctly lobulated and the examining fingers could be passed between the tumor and the trachea. Palpation painful; no glandular enlargement.

Auscultation revealed no bruit.

Cold applications and a calomel purge were ordered and the fever rapidly diminished, as shown by the curve, and appetite improved.

At the end of five days the ice bag was discontinued—the tumor not having increased in size—the tenderness, however, being less. The same day a needle was introduced into the fluctuating part of the tumor and one ounce of bloody fluid withdrawn, and a dressing of moist

gauze covered with oiled silk applied. The aspirated fluid consisted of several creamy-red blood cells, some few white cells and on staining for tubercle bacilli none were found.

At the end of ten days—in the meantime tr. iodine having been applied externally and potassium iodide administered internally—no change was to be seen and an operation was decided upon. But first as to diagnosis. There were at least four possibilities:

1. Aneurism.
2. Tumor of the deep lymphatic glands.
3. Tumor of the thyroid or accessory thyroid.
4. Tumors arising from the bronchial cleft.

Aneurism could be excluded by the failure of thrill, bruit, and the expansile pulsation.

For tumor of the lymph glands spoke first and foremost the history given by the physician who first examined the patient and referred her to the German Hospital—Dr. S. Stark. The growth began as a small movable tumor beneath the sterno-cleido, and on level of the hyoid bone. In twenty-four hours it reached a size almost that which it presented when patient was admitted to the hospital.

The lobulated condition of the tumor and the possibility of pushing the fingers between it and the trachea, would also be in favor of the same idea. An acute inflammation of the lymphatics was rendered improbable on two accounts. First, there was nowhere in the mouth and pharynx, or on the external cutaneous surface, a cause for an acute adenitis to be found, besides the other lymph glands of the neck were not all enlarged, and a tubercular adenitis was rendered improbable by the rapidity of growth by the character of the fluid withdrawn, and by there being no tubercle bacilli in the same. Thus if lymphatic, the possibility was in favor of some malignant growth.

Tumors of the thyroid or accessory thyroid were hard to exclude; indeed, had it not been for the early and accurate examination of Dr. Stark, the diagnosis would, I think,

have been made as tumor of the thyroid, for in the physical examination what spoke most against such an idea was the ability to isolate the trachea, and in this certainly no one would be justified in excluding a tumor of the thyroid, much less one of the accessory thyroid glands.

An acute thyroiditis is not at all an unknown thing, and that it may be limited to one lobe or to a goitre affecting only a portion of one lobe, or to an accessory gland, are facts which are acceded.

Tumors arising from the branchial cleft, fœtal remains, are in general of two kinds, the first of which is commonly called *hydrocela colli*, could be excluded both from the consistency of the tumor and the character of the fluid withdrawn; the other kind of tumor—the solid tumor—most frequently epitheliomatous, could not be excluded. An operation alone could decide.

Thus at the time of the operation the diagnosis was unsettled between three, viz: tumor of lymph glands, tumor of the thyroid or accessory thyroid, and solid tumor arising from the bronchial cleft, with the probability in favor of the tumor of lymyh gland, on account of Dr. Stark's observation.

Operation.—An incision was made parallel to the border of the sterno-cleido-mastoid and enlarged until it extended above the line of the hyoid bone to the sterno clavicular articulation. The anterior belly of the omohyoid was divided and the fascia slit up on a grooved director exposing the capsule of the tumor. Then began, with the finger and the director, a tedious dissection, aided when necessary by cutting between ligatures until the upper border of the tumor was reached. Here a vessel of no great size was found. On following the upper border of the tumor toward the median line, it was felt to pass between the larynx and the œsophagus until it protruded on the other side. Fortunately this portion of the removal, though slow, offered no great difficulty and was attended by but little hemorrhage. The tumor was then removed from above downwards, its lower end passing well in behind the sterno-clavicular

articulation and offering the most difficulty in removal. At no time was there alarming hemorrhage. Time of operation 2½ hours.

The nutrient artery was ligated at the lower end and was about the size of the inferior thyroid. The recurrent nerve was not seen. Wound lightly stuffed with iodoform gauze, wrung out of 5% sol. of carbolic acid, and the same allowed to protrude at lower angle of wound. Silk sutures of rest of wound. Antiseptic dressing. Gauze removed at end of forty-eight hours and fresh bandage applied and allowed to remain five days when the stitches were removed, union per primam. The part of the wound where the gauze had protruded closed three days later. No pus; no reaction.

Following day after of operation menses came on. Voice weak, but clear and distinct.

Four weeks after operation patient doing light housework. Some tenderness of the lower linear scar; some anæsthesia and analgesia of the skin in the region between the scar and the median line. About this time patient went on a pleasure excursion to one of the summer resorts in the neighborhood of the city. The following morning she was aphonic. Laryngascopic examination shows motion in both cords but on attempting phonation an oval space is left between them. Voice regained in two days.

The tumor removed consisted of a mass the size of a fist, in general pyramidal in form, of fluctuating consistency in its largest part, and presenting a tongue-shaped prolongation which had extended between the larynx and œsophagus; this portion was some one and one-half inches broad and showed distinctly the grove made by the larynx. The tumor was composed of a number of lymph glands, the largest one of which contained some four drachms of bloody fluid. Most of the smaller tumors presented hemorrhages.

Microscopic examination shows the tumor to be an epithelioma and from the history of the case there can be but little doubt that its origin was to be found in the fœtal remains of the branchial cleft. That in its growth

the neighboring lymphatics had become secondarily involved.

September 1. Nine weeks after operation; no signs of recurrence.

September 5. Small abscess developed at the clavicular end of scar which, after opening, discharged for some ten days, but upon enlarging the opening and scraping with a sharp spoon healed in three days.

At time of writing, October 1, 1890, there is no sign of recurrence.

THE SURGICAL CONCEPTION OF PERITONITIS.

BY JOSEPH PRICE, M. D., PHILADELPHIA.

Read at the meeting of the Virginia State Medical Society at Rockbridge Alum Springs Sept., 1890.

Within the last few years there has gained, in the minds of those who have followed the principles of surgery, which always look for cause where there is an effect, a gradual clearing of their conception of the condition called "peritonitis." The word used to be whispered in awe, and the general idea of its existence was surrounded with a veil of mystery which, like the ark in the temple, none dare approach, much less to touch. In the earlier days of abdominal surgery, Baker Brown exclaimed, "It is the peritonitis that beats us," but, unluckily, did not stop to inquire or discover why peritonitis came upon the field conquering and to conquer. With the earlier surgeons, just as with the earlier and many physicians of the present, peritonitis was looked upon as an accident, and was treated accidentally, in the full sense of the word. Cause and effect were not sought for, and so were not found. When finally it was noticed that the cases dying of peritonitis had pints, quarts, or gallons of fluid in their abdomen, or blood may be, a relation between the two was finally traced, and much of the mystery was cleared away by draining. The idea once gained, that a foreign matter had much or all to do with the condition; when serum was not found, other cause was

looked for, and so often discovered, either directly or through flaw in the operation, that now it is finally concluded that peritonitis is never accidental or idiopathic. This is true, at least of the surgeons. So far as the exact diagnosis of the condition was concerned little attempt was made towards it, though by physicians generally thoracic disorders of a similar kind were confidently located and treated. All in all it has remained for surgery to clear away the error and misconception of the abdominal varieties of the disease, and even now to invade the thorax and urge in disease therein peculiar that the same line of treatment be followed out as in the abdomen.

It needs no statistics to prove that but a short time since, all cases of peritonitis were treated alike without any efforts being made to discover the cause. Abdominal surgery, beginning with the grosser ovariotomy, demonstrated plainly that to ruptured cysts and twisted pedicles enough opium had been given to narcotize the land, and enough flaxseed wasted to oil the wheels of the universe.

Going over from diseases of women into the abdomens of men, case after case wa demonstrated, in which an appendicitis was at the bottom of many of the so-called idiopathic cases of peritonitis, until now, no matter what the disease or the organ effected, given a certain set of symptoms, the nature and cause of the condition are at once suspected, and attention directed thereto. But if in general disease so great a change has been wrought it is the special field of those peculiar to women that the greatest change of attitude is to be observed. This is true, both owing to the anatomy and physiology of her sex. Anatomically, her peritoneum is constantly exposed to outside infection. Physiologically, she is called upon to perform functions that render her liable to this infection. Not only do her natural functions conspire to endanger her, but she is a victim of the misdeeds of men, and thereby rendered especially liable to peritoneal inflammations. Once it was discovered that gonorrhœa was readily transfered along the Fallopian tubes, the nature

and pathology of many hitherto puzzling cases of abdominal inflammatory trouble was suddenly cleared up, and therefore of peritonitis, due to another cause. This pathology and the kindred one of dirt infection of all kinds, have led to the most significant change in the handling of women in all classes and conditions of society, and has revolutionized the methods of treatment of many diseases, especially of those incident to child-birth. Within the memory of many still alive, child-bed fever was looked upon as a visitation of Providence, and so treated, by expectation and prayer. When Oliver Wendell Holmes, then a young man, insisted upon the essentially specific nature of the fever, two of Philadelphia's most renowned obstetricians derided, in the light of their great experience, the chimerical notions of the hairbrained youth, who has since lived to see his views taught where they were once derided. This practical spirit of investigation *versus* faith, in all things that pertain to disease, no where has shown so brightly as in the domain of surgery, and no where in any set of diseases as those formerly ranked under the head of peritonitis. But the benefits have not only accrued to women, but to their children. Cleanliness and douches to obtain it, urged primarily to protect the mother, resulted secondarily in saving the lives of many children, and when not their lives their sight. This is one of the proudest triumphs of antiseptic cleanliness. Going outside, for an instant, of the domain of medicine, and entering the field of sanitation, modern systems of plumbing and drainage have been revolutionized by obstetrical and indirectly, surgical observation upon sepsis from drainage. High temperature in the presence of plumbing, and their absence in presumably filthy localities where no plumbing was present, could not help but attract attention to the existence here again of cause and effect. This alone in all lying-in hospitals must ultimately be accepted as a demonstrated fact, and if a perfect system is to be hoped for, will lead to the exclusion of all closets, beyond the limits at which infection is possible.

Thus it will be seen that in obstetrics, especially the surgical conception of the nature of peritonitis alone, easily is equal in importance to any of the many forward steps of the day. But the field of its importance goes still further, and aims at improving even surgery itself. In other words, surgery discovers surgical peritonitis, and strives to find its cause. In the modern gynecology many of the minor procedures are arranged at the bar of surgery, and compelled to render an account of themselves. Under this head come intra-uterine applications, dilatation and scraping of the uterus and cervix, closure of the perineum and cervix, followed by ovarian and tubal disease. Here exact scientific surgery calls upon the minor gynecologist to keep hands off. It warns him that not every cervix can be touched with impunity, and that if there is suspicion of pelvic disease or inflammation, such cervix is not to be touched at all.

It warns the promiscuous dilator of cervices that the ruthless laceration of the cervical canal is more liable to cause disease than to cure it, and that a forcible destruction of cervical integrity is worse than a laceration at child-birth, under ordinary circumstances. It teaches the conservative gynecologist, who tries to cure pelvic disease by the derivation of cervical operation, that shortly he will have a second and worse operation, due to his first.

Going still futher the appreciation of constant local peritonitis in a class of operator's work, it looks to them for the cause, and cries halt to their prefences to pass judgment upon all surgery of the kind, because their own results are bad. It recognizes in the failures their causes. Under this head may be classed fistulæ, stercoral and others; adhesions to stumps, of intestines and general intestinal adhesions. It recognizes the fact of incompetency to judge of the value of certain procedures in that their failures are peculiar to these censors only. This is especially true of those who condemn the drainage-tube as causing the last named complication. The treatment of the stump, when faulty or careless, is often a cause of

localized peritonitis, and the after adhesions produced are often as annoying and painful as the original disease. The introduction of antiseptic solutions into the abdominal cavity has been found a fertile source of peritonitis, resulting in universal adhesions of the intestines, omentum, and parietal peritoneum. Here surgery unlearns and teaches the necessity of not causing what it is its function to remove, and by showing the danger of a supposed refinement, not only exposes its non-efficiency, but also its absolute danger, as a cause of a most serious non-suppurative peritonitis. Here again surgery has demonstrated the kinds of peritonitis, and hence placed a dividing line between the cases that tend spontaneously to recovery, and those that demand operative treatment. Simple non-suppurative, congestive, inflammatory peritonitis occurs frequently, as a sequel of excessive or prolonged hyperæmia, or from simple traumatism. Such, for instance, are the irritative adhesions above referred to. Suppurative peritonitis, arising from foreign septic matter, is entirely distinct, and may be called specific. It has a pathology of inflammation, but is septic from its origin. These are the traumatic cases from stabs and gunshot wounds. It is exceedingly rare for wounds of this order in the abdominal cavity not to result fatally. In this direction the teachings of abdominal surgery on the subject of peritonitis are now the wonder and admiration of the civilized world. We have in our society a surgeon now renowned in peace, as he was steadfast in his duty toward the wounded during his long service. He says now that he would like to live again through the misery of all his sad experience just to save his cases of abdominal gunshot wounds. The surgical conception of the nature of all operations upon the abdominal viscera has led to the abandonment, not only of the dicta of the past, but to its utter and entire demolishment. It has led to the annihilation of all statistics of the past as so much garret rubbish, and has laid out a new field for itself, into which no one but the elect, under the new dispensation, can hope to enter. So far as traumatism is

concerned the prevention of peritonitis by prompt interference was sought. But experience in this very line has opened a new field in utilizing peritonitis as a saving agent in certain surgical procedures; I mean in intestinal anastomosis. Here we rely upon a localized adhesive peritonitis to effect a cure in conditions where, without it, the danger would be vastly greater than it is. Before the study of adhesive localized peritonitis the operations of intestinal anastomosis would have been impossible, and the operations for the resection of intestine, with the consequent prolonged stitching and other manipulation, was the only source. This operation is, perhaps, the most notable example of utilizing what is commonly regarded as a calamity for conservative surgery, in all the range of the art. But this is not all. The knowledge applied in such cases renders possible, in many cases, what would be otherwise tedious and dangerous, closing procedures in many of the major gynecological operations, a certain speedy resort to the saving results of adhesive peritonitis; I refer especially to hysterectomy. Without the certainty that the parietal peritoneum will surely unite at once almost with that of the stump, the operation of supra-vaginal hysterectomy would be rarely attempted with any hope of success. As it is, the rapidity with which the two serous surfaces unite, shuts off the peritoneum at once from the danger of infection and renders safe thereby an otherwise dangerous procedure. But now, if the surgical conception of peritonitis has opened up a new field of operative surgery, it has closed a most pernicious field in medicine. Where trauma exists, or is reasonably suspected, the rule is now not to wait and make the patient regardless of both life and death by opium, but to operate to save at once. Gunshot wounds excepted, perhaps nowhere so much as in appendicitis has trauma lately received so much attention as the cause of a peculiarly insidious disease. As a result, we will have fewer deaths from this cause, the more it is studied and appreciated, and the more its real nature and cause are appreciated as being essentially a suppurative perito-

nitis. In the presence of suppurative peritonitis, most common in women by reason of their greater risk and liability to external septic influences, the treatment is entirely revolutionized. If the abscess is limited and due to a suppurating tube or ovary, its inflammatory limits are mapped out, the disease is attacked at its fountain head and the patient is cured, simply because we now know that the limitation of such a collection cannot be permanent, and that there is no safety with pus anywhere within the limits of the abdominal cavity. Here the surgical treatment of peritonitis by the salines is of no avail, though it will relieve pain almost as promptly as opium, without a tithe of the inconveniences of that drug. In the non-suppurative inflammatory exudates of a simple irritative peritonitis, salines or calomel, the saline treatment is the common inheritance of all surgeons and of a few physicians, too many of whom are as slow to accept it as really efficacious, as they are to aspirate a pleurisy without delaying until the lung is carnified and the patient translated.

After inflammations, subsequent to child-birth, with our knowledge of the frequency of outside contamination, with the consequent septic involvement of the peritoneum, fatal cases should now be the exception. My own experience in this line of cases is increasing almost weekly, and the results of interference, surgically, are such as to encourage me as to the ultimate general acceptance of the opinion that most cases of post-partum suppurative peritonitis should recover.

The danger in delay is that a general septic condition be established, and that accordingly, local treatment will be of no avail; to open the abdomen, irrigate with hot water, place a drainage tube in extreme cases, is sometimes the only resource.

This, in these cases, must be the only preparatory step to subsequent operation to remove all cause for future trouble. My success in these cases has been more than a justification for any statement concerning them that may seem too positive. They stand out in pleasant contrast

with the opium fed, poulticed clad, mortuary list that every day is heard of. For the reference of the fellows, I wish to record a few typical cases in the proceedings of the society:

Case I.—Mrs. B., aged twenty-eight years. Seen five weeks after labor. High temperature; rapid pulse; rapid progressive emaciation; profound sepis. Abdominal section revealed, thickened omenteum adherent over entire pelvis; right pyosalpinx and abscess the size of an orange in the ovary; universal adhesions; six inches of ilenm cheesy and disorganized to the mucous coat along the line of adhesion on the right side. A knuckle of bowel was opened in enucleating the appendages; it was trimmed and stitched; there was purulent peritonitis, and one pint of pus free in pelvis, from leakage; appendages removed; cavity irrigated and drained; recovery.

Case II.—Mrs. M., aged twenty-four years, seen twenty-one days after labor. Abdominal section showed acute puerperal pyosalpinx on the left side, and general purulent peritonitis; bowel, omenteum and pelvic organs matted together by friable adhesions; left tube gangrenous; right tube congested, but showed no evidence of pus; only the left tube removed; irrigation and drainage; recovery.

Case III.—Mrs. W., aged thirty-six, seen twelve days after labor; most profoundly septic. At the section universal friable adhesions were found; both appendages absolutely gangrenous; uterus large and soft, with cheesy walls; removal of both appendages; irrigation and drainage; recovery.

Case IV.—Mrs. F., aged twenty-three, seen four weeks after labor; removal of both appendages for left pyosalpinx and ovarian cyst; right tube occluded, adherent and acutely inflamed; adhesions universal; general peritonitis; irrigation and drainage; recovery.

Case V.—Mrs. S., seen two years after labor. She had puerperal fever and was in bed nine months; since then has been a hopeless invalid, with loss of locomotion, constant agonizing pain, great emaciation, constant nausea and recurring attacks of peritonitis. I removed a left pyosalpinx and ovarian abscess; dense bowel adhesions; omenteum, bladder and uterus glued together; irrigation and drainage; recovery from the operation and cure.

It should be noted that:

1st. All cases were of true "puerperal fever."

2d. All were saved by section, after well-directed medical treatment.

3d. The operations were undertaken to save life. not to demonstrate ideal surgical procedures.

SOCIETY TRANSACTIONS.

THE TRI-STATE MEDICAL ASSOCIATION.

The following is the program of the Second Annual Meeting of the Tri-State Medical Association, which met at Chattanooga, Tennessee, October 14, 15 and 16:

TUESDAY, OCTOBER 14.

9 to 10 A. M.—Registration, Introductions and Handshaking.

10 to 12 A. M.—Reports of Executive Committee and Officers.

Reading of Papers.

AFTERNOON AND EVENING SESSIONS.

Reading of Papers.

WEDNESDAY, OCTOBER 15.

MORNING SESSION.

Reading of Papers.

AFTERNOON SESSION.

Election of Officers.

EVENING SESSION.

Address of Welcome by Govenor Robert L. Taylor.

Response.

President's Address—"The Doctor," J. B. Cowan, Tullahoma, Tenn.

THURSDAY, OCTOBER 16.

Reading of Papers.

LIST OF PAPERS.

President's Address—"The Doctor"—J. B. Cowan, M. D., Tullahoma, Tenn.

Amputation of Hip in "Two Times Method"—Duncan Eve, M. D., Nashville, Tenn.

Report of a case of Ulceration after Exsection of the Breast—L. G. Dozier, M. D., New England City, Ga.

Report of a case of Fracture of the Pelvis, with presentation of patient—W. T. Blackford, M. D., Graysville, Ga.

Case of Remarkable Injury with Recovery, presentation of patient. E. A. Cobleigh, M. D., Chattanooga, Tenn.

Report of a case of Gangrene of the Leg—W. L. Stephens, M. D., Dayton, Tenn.

Report of a case of Phlegmonous Abscess—C. H. Holland, M. D., Chattanooga, Tenn.

Report of a case of Cancrum Oris—W. P. McDonald, M. D., Hill City, Tenn.

Report of cases of Fracture at the Elbow Joint—Andrew Boyd, M. D., Scottsboro, Ala.

Neuralgia—W. L. Gahagan, M. D., Chattanooga, Tenn.

Morbid Reflex Neuroses Amenable to Surgical Treatment—Willis F. Westmoreland, M. D., Atlanta, Ga.

Abscess of the Liver—Richard Douglass, M. D., Nashville, Tenn.

Report of a case of Abscess of the Liver—J. R. Rathmell, M. D., Chattanooga, Tenn.

Cases of Gall Stones—E. E. Kerr, M. D., Chattanooga, Tenn.

Expert Testimony—Mr. Sydney B. Wright, Chattanooga, Tenn.

On all Sides a Learned Doctor—James E. Reeves, M. D., Chattanooga, Tenn.

The Dynamics of Mediumism—J. E. Purdon, M. D., Cullman, Ala.

A Contribution to the Study of the Continued Fevers of the South—Llewellyn P. Barber, M. D., Tracy City, Tenn.

A few Remarks on the Fevers of Middle Tennessee and their Treatment—J. C. Shapard, M. D., Winchester, Tenn.

Some Phases of Typhoid Fever as well as the Abandonment of the Typho-Malariæ—J. W. Russy, M. D., Rising Fawn, Ga.

Paper by Chas. W. Tangeman, M. D., Cincinnati, Ohio.

Diagnosis of Corneal Affections—Flourescin—Frank Trester Smith, M. D., Chattanooga, Tenn.

Eye Strain—A. G. Sinclair, M. D., Memphis, Tenn.

Physiological Functions of the Nose—A. B. Thrasher, M. D., Cincinnati, Ohio.

Uterine Fibroma—J. C. Murfree, M. D., Murfreesboro, Tenn.

Some Irregular Forms of Epilepsy, with report of cases—W. C. Naples, M. D., Bellefonte, Ala.

Paper by F. W. McRae, M. D., Atlanta, Ga.

Dilated Cardiac Hypertrophy, with Nephritic Complications—W. C. Tones, M. D., Chattanooga, Tenn.

Urethral Stricture and Its Complications—J. D. Gibson, M. D., Birmingham, Ala.

Palliative Treatment of Fissure of the Anus and Stricture of the Rectum—John P. Furniss, M. D., Selma, Ala.

Some Affections of the Rectum—L. J. Krouse, M. D., Cincinnati, Ohio.

The Buncombe County Medical Society met at 8:30 p. m., Monday, October 6, 1890, in Dr. W. P. Whittington's office, Dr. M. H. Fletcher, president, in the chair. The following were present: Drs. M. H. Fletcher, J. A. Watson, W. P. Whittington, S. W. Battle, F. T. Meriwether and W. Stewart Leech (by invitation).

Dr. Burroughs not being present no paper was read.

A very interesting informal discussion was opened by Dr. S. W. Battle upon jaundice which was taken part in by all the members present.

The president appointed Dr. H. Longstreet Taylor to read a paper at the next meeting.

The Society then adjourned to meet in Dr. M. H. Fletcher's office on Monday, November 3, 1890 at 8 p. m.

Physicians from the entire western section of North Carolina are urged to join this Society as being at a central point which can be easily reached, a large number could get together every month and be a great deal of value to each other. Dr. J. A. Watson is secretary and should be addressed for applications for membership.

CORRESPONDENCE.

NEW YORK CLINICAL AND NEWS NOTES.

William Broaddus Pritchard, M. D., Lecturer on Mental and Nervous Diseases, N. Y. Polyclinic.

In no city of the east, so far as the writers personal knowledge enables him to judge, are the associated conditions of medical practice so peculiar as in New York. In no community can there be found a body of more indefatigable or energetic workers, and it is equally true that no body of medical men are so conscientiously scrupulous in recognizing the fact that nature has placed a physiological limit to the mental and nervous endurance of a brain-worker. During the winter months it is positively wonderful to observe the amount of work undertaken and successfully accomplished.

A day's programme for example, will include three hours of office practice, an hour in the lecture room, three hours of outside practice, largely perhaps in consultation work, two hours or more in attendance upon hospital appointments, with the probable tedium of an operative clinic, an hour or more in evening office work, or in attendance upon some one of numerous society meetings, with the coincident strain involved in participation in some important discussion.

"Enough" you will say, and your words are true, but

the days work is not over. The tired physician returns to his office to find upon his desk the half-finished manuscript of an article for next week's Journal. It must be finished at once, and if not interrupted, his work often extends far into the night or even the morning of the next day. The article may be finished, if so there is another to be begun, or it may be some more durable monument to his name and fame, which demands attention. They are prolific writers.

"How can they stand it?" I cannot tell you; I can simply state that such is the fact, and I may add that with the exception of an occasional cerebral neurasthenia or a rare general paresis, there is no evidence that such an amount of work has been disastrous. I have not given you the program of a day but of many days, of nine long months in many instances. I have not related an isolated example in them. There are few men in New York whose names are known to the readers of this Journal who do not come within the number whose day's work I have outlined.

With the advent of warm weather however, all is changed. In conformity with the demands of a time honored custom, dependent upon experience and a knowledge of the phyiological requirements of nature, the beginning of July is the signal for a general exodus of doctors. Many spend the succeeding three months in Europe or elsewhere abroad; long trips in the far northwest attract others, while the thousands of near-by seaside and mountain resorts hold the remainder until the cycle of the seasons brings with it cooler weather, and a return to active duty. The visiting doctor from North Caorlina would find New York in August apparently "given over bodily to the enemy." There are however, several thousand guardians of the public health left, and the great majority of those who are away are readily accessible and can be promptly summoned.

Apropos to the above comes the question "what is the

best time to visit New York?" The answer depends upon your object. If you wish merely to "hob-nob" with "big-bugs" come in winter. If to add to your store of medical knowledge, to rub off the rust by contact with medical men and new ideas, by all odds the summer is the season. Our clinical population is the same, "the poor are always with us," our clinics if anything are larger and more varied. Class rooms and operating amphitheatres are less crowded with students and members of the lecturing and operating staff can answer your questions with far more courtesy and mutual satisfaction because less busy. There are always a few often brighter lights left in the city, and they are much more approachable.

Among the minor advantages are those of pleasant weather, a very appreciable advantage to southern men, greatly diminished expenses for board and lecture fees, both of which are about one-half winter rates, and the opportunities which offered to the observant to pick-up bargains in medical books and supplies, which occur as a result of the summer stagnation in business.

Another feature which affords a phase of medical life peculiar to New York is to be noted in the enormous, almost princely, incomes which many of our celebrities derive from practice. I am not able to state who heads the list, but the amount is somewhere near $100,000.00. I could readily name half a score of men who are in receipt of incomes of not less than $50.000, and the statement does not require an extraordinary credulity in view of the fact that $5,000 fees are by no means rare, while a thousand dollars for a single professional service is paid every day in the year.

There is no regular fee bill in New York, the economic and financial conditions which prevail do not admit of its establishment. There are men here who have a legal standing who make visits for 50 cents, many more charge one dollar, while with the majority, two dollars is the regular fee. In fixing the fee the reputation of the

physician, the character of the service and the circumstances of the patient, regulate the amount. In other words, it is customary to "size up" a patients "pile" and charge accordingly.

Always differentiate your cases of sciatic neuritis from your cases of sciatic neuralgia. Upon such differentiation depends your prognosis, your treatment and your reputation as a successful physician. Anti-neuralgic remedies are indicated of course, for the one class, while your cases of neuritis must be treated very differently. In both instances, and especially the latter, hunt for the cause. Investigate the rectum for faecal impaction, acting by pressure, look for varicose veins, or tumors, for bone disease, for specific gumma. A blood state may be responsible, though the rheumatic diathesis or cachexia, is not considered so important a factor as formerly. Rest, absolute and enforced, is the indication in sciatic neuritis. Put on a hip splint, put the patient in bed, apply cold (ice-bags) or heat (hot-water bags,) do not alternate them, however, in a few days begin to use galvanism, applying one electrode slowly along the course of the nerve, the other being held in position over the lower dorsal spine or upper sacrum. Use small quantities of electricity at first, not more than five and preferably three mille-amperes, and do not interrupt your current. If excessive pain demands urgent attention, there is nothing equal to morphia used hypodermically. It is better far than either water, cocaine, osmic acid or chloroform. If the case becomes chronic, increase the quantity of electricity and give potassium iodide.

Prof. Landon Carter Gray, is authority for the statement that iron is more than a mere tonic in cholera or St. Vitus dance, he teaching that it exerts an effect, especially if combined with arsenic, of an almost specific character. After endless experiments, with every drug suggested, including cimicifuga, strychnia zinc,, avena

sativa, antipyrin, hyoscyamin, the bromides and iodides, the results prove arsenic to be the remedy for chorea. A routine formula at the New York Polyclinic is:

R.	Liq Kali Arsenit.	dr. $\frac{ss}{ii}$.
	Ferri Dial.	oz. $\frac{ss}{ss}$.
	Aqua q. s. ad.	oz. $\frac{iv}{iii}$.

M. Sig. dr. $\frac{i}{i}$ t. i. d. in water.

The arsenic may be increased if necessary. Do not however, add to your choreic symptoms those of arsenical poisoning.

VIRGINIA MEDICAL SOCIETY.

Rock Bridge Alum Springs, Va., Sept. 5, 1890.

Editors Asheville Medical Review: The meeting of the Virginia State Medical Society has just closed. It has been one of the most successful ever held. While numerically it was not as strong as it should have been, yet good work was done and a royal good time followed.

Some of the M. D.'s showed that they were good shots at the shooting gallery, and others that they were experts at bowling in the ten-pin alleys.

The banquet was a very enjoyable affair, and the speeches were good, short and to the point. No doubt much of its success was due to the fact that many elegantly dressed ladies were present, lending beauty and charm to the ocasion. Here could be seen many of the leading physicians and surgeons of Virginia, along with invited guests coming from New York, Cincinnati and Philadelphia. Much credit is due to the officers of the Society, together with the managers of this beautiful and healthful resort, Rockbridge Alum Springs.

One thing is certain, the attendance averaged well, as there was nothing aside from the grounds, to keep members away from the meetings. This was an improvement over the city meetings where is so much temptation on the outside to lessen the attendance.

Visitor.

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EDITORIAL.

Dr. W. S. Christopher, of Cincinati, has been called to fill the Chair of Practice of Medicine, and Clinical Medicine, of the University of Michigan, Ann Arbor.

Dr. Christopher has done a great deal of original work in the investigation of the diseases of the digestive system, especially in infants. His ideas upon this subject have attracted much attenten, both at home and abroad, on account of their originality and intrinsic merit, as well as the scholarly and scientific arguments with which they all maintained.

As a teacher he has been very successful at the Medical College of Ohio, where he has had full charge of the Chemical Laboratory, and has also delivered clinical lectures upon the diseases of children for a number of years. His chemical course went beyond the bounds of the routine urinalysis into the more difficult field of animal chemistry, a digression which should be

introduced into the laboratories of all medical colleges.

The Medical College of Ohio, looses a very successful and popular teacher, and one who will not be readily replaced. Dr. Christopher will have charge of the medical wards of the State Hospital.

The University of Michigan is to be congratulated upon their happy choice, and Dr. Christopher upon being called to a position where his natural appetite for scientific research can be thoroughly utilized.

The next session of the Memphis Hospital Medical College will open on Monday, Oct. 27, observation during the past two years having shown that this arrangement is better suited to the student than the former custom of opening on October 1. The renovation and improvement of the college building, including refitting with new and improved heating arrangements, are now in the hands of a committee and will be completed in ample time for the opening. The indications now are that the attendance on the coming session will largely exceed that of any previous year.

INTERNATIONAL MEDICAL CONGRESS.

The Tenth International Medical Congress assembled in Berlin on August 4th and continued until the 9th, under the presidency of the illustrious Virchow, who made the opening address. In point of attendance this Congress far surpassed all its predecessors, having drawn together more than 6,000 physicians, representing nearly, or quite, every civilized country on the globe—our own sending no less than 623. Some of our contemporaries have expressed the opinion that such assemblies are attended mainly by the small fry of the profession; but we are not disposed to sneer at the sky because all the stars in the firmament are not of the first magnitude, and we doubt if the history of the world can show such another concourse of illustrious names as are found on the roll of the Tenth International Congress. Even to enumer-

ate the names of the men of eminence present—to many of whom humanity owes a debt beyond its power to repay —would occupy more space than we can at present spare. It may be true that gatherings which necessitate the employment of several languages are not well adapted to scientific discussion, but this will not affect the value of the papers presented, a large proportion of which will no doubt prove to be important additions to the general stock of professional knowledge. One great purpose of these international assemblies is to unite the medical world in the great contest with disease and death, and by this concentration of force to conquer or diminish the perils that threaten the human race.

The next Congress will be held in Rome in 1893.

Cholera Intelligence. Cholera is still prevalent in Spain, where nearly three thousand cases have been recorded. It is certainly very re-assuring for the rest of Europe and ourselves, to know, that although over 20,000 persons have migrated from Spain to France, not a single case of cholera has been reported anywhere in Europe except in Spain. If the coming winter should be at all severe in Spain, the progress of the disease will be very greatly checked and its virulence gradually diminished until it again will finally disappear from Southern Europe. It is prevalent at Mecca, and has appeared at Tokio. Should it become epidemic in Japan we would be threatened from both the east and west and our Sanitary authorities should be doubly on their guard.

EXCHANGES, TRANSLATIONS AND SELECTIONS.

REPORT OF CASE OF CHOLECYSTOTOMY, WITH EXHIBITION OF SPECIMENS.*

BY RUFUS B. HALL, M. D.,

Surgeon to the Cincinnati Free Hospital for Women; Professor of Gynecology at the Cincinnati Polyclinic; Clinical Lecturer on Gynecology at Miami Medical College; Fellow of the British Gynecological Society; Fellow of the American Association of Obstetricians and Gynecologists, and of the American Medical Association, etc.

My purpose in reporting the following case is to illuslustrate how little is accomplished by nature's effort in some cases of obstruction in the common bile duct, and at the same time to emphasize the necessity of operative interference, as soon as it is evident that nature is not competent to overcome the obstruction. Mrs. B., aged thirty-nine years, mother of seven children, the youngest six years of age. She is a slender woman, never weighing more than one hundred and fifteen pounds, and has always enjoyed fair health previous to the present illness.

February 6, 1890, she was seized with an attack of pain, and sent for the family physician—Dr. E. S. Stevens, of Cincinnati. He found her suffering with hepatic colic of a severe type. Hypodermic injections of morphine were given for the relief of the pain. She vomited a number of times, and for three days the ejected fluid contained bile. The morphine was required for four or five days, when the pain subsided. About that time it was observed that she had slight jaundice, which remained about one week. It was now observed that there was an enlargement in the region of the gall-bladder; this enlargement disappeared in about two weeks. She was confined to her bed ten or twelve days. She had not regained her strength sufficiently to enable her to

*Read by title, Ohio State Medical Society, June 4, 5 and 6, 1890.

oversee her domestic duties when, on March 9, she had a recurrence of the pain, necessitating the use of morphine. The stomach became very irritible, and she vomited at short intervals. She was very much constipated during the entire illness.

March 19 it was again noticed that she was slightly jaundiced, which grew rapidly worse until, at the end of a week, she was the color of a rusty, or dried-up lemon. It was also noticed that there was again an enlargement in the region of the gall-bladder, the size of a closed hand. The stomach became exceedingly irritable; she vomited as often as every fifteen minutes, for hours together, and during her entire illness she rarely went four hours without vomiting. But after the jaundice became manifest in the second attack of pain, there was *no indication of bile*, either in the fluid vomited or the stools. Thus it was reasonable to infer that the obstruction was in the common bile duct, and, from the sudden onset of the symptoms, that the obstruction was due to an impacted gall-stone. The pain was not so severe now as in the commencement of the attack; a half grain of morphine two or three times in twenty-four hours, made her condition bearable. Although she suffered great pain, she said "her greatest suffering was from nausea and vomiting." Nothwithstanding she had regular rectal nutrient enemata, she suffered greatly from hunger, and said "that she could appreciate the feeling of shipwrecked sailors who were driven to that desperation from hunger that they killed and ate their companions."

About April 1 she was in a condition that an operation appeared to be the only means that could afford relief, and it was so stated to the family; but their consent to any operative interference could not be obtained. The following day her condition appeared to be better in every way. She remained better for a few days; yet she suffered so much from nausea and vomiting that she required morphine, which relieved the distressing symptoms to some extent. All the usual remedies for nausea and vomiting, including cocaine, phenacetine, and hy-

drocyanic acid, were tried, with only temporary relief.

April 11 the emaciation was extreme, her estimated weight was ninety pounds; the suffering from the pain and sick stomach was great, and it was evident that she would not live long unless she could be relieved. At that time her husband consented to consultation in reference to an operation. I saw the case with Dr. Stevens, the 12th. She was in a dazed condition—listless, and did not appear to notice anything or anyone about her; yet she answered questions rationally when spoken to. Pulse, 100; temperature, 97½°; cholæmia, extreme. At that time the liver was enlarged; the lower border was clearly defined about four inches below the ribs. It could not be determined, by the examination, that the gall-bladder was enlarged. She vomited a little glairy mucus every few minutes. The patient appeared to be in a dying condition. She was so feeble that any operative interference seemed to promise nothing but a fatal termination; yet this promised a slight hope, and there appeared to be no hope if the case was left to nature. This statement was made to the husband and friends, and they quickly decided to have the operation made.

A patient in this condition has more than the ordinary dangers encountered in other abdominal operations. The deteriorated condition of the blood which had existed so long, and her extremely feeble and emaciated condition, made it very doubtful if she would be able to bear the operation and subsequent shock. Even if she passed through these, the great danger of secondary hemorrhage was yet to be encountered—which is one of the most dreaded and frequent complications following gall-bladder operations upon cholæmic subjects.

Greig Smith* says: "Cholæmia, not only as weakening and depresssing the patient, but also predisposing to bleeding, is an unfavorable element. In only seven of Musser's and Keen's series of thirty-five cases of cholecystotomy was juandice present, and five of these cases died—half of the whole mortality. That the jaundice

*Third edition, pp. 600-601.

had much to do with this excessive death-rate there can be no dispute. This suggests early operation, before the patient's condition is lowered by cholæmia."

In seventy-three cases quoted by Smith, where the gall-bladder was sutured to the abdominal wound, eleven died—five from hemorrhage and collapse. He says "collapse with hemorrhage would seem to be the most usual cause of death; and this cause is the most potent in cholæmic individuals." In this case it proved to be an exceedingly grave complication.

The operation was made April 13, 1890, at 10 a. m. An incision, two and one-half inches long, was made two inches to the right of the median line, over a prominence, which could be distinctly felt when the patient was under the anæsthetic. This prominence was supposed to be gall-bladder. Upon opening the peritoneal cavity firm adhesions were encountered with omentum and intestine, and the enlargement that was supposed to be the gall-bladder proved to be the edge of the liver. The gall-bladder was enlarged, but the lower end of the bladder was just at the upper end of the incision, which necessitated exteding the incision upwards about two and one-half inches. After separating several coils of intestines, I could detect several stones in the enlarged gall-bladder, which was aspirated and six ounces of gall removed, which I expected to present to you, but it could not be preserved or kept in a condition to bring here. I then incised the gall-bladder and removed four gall-stones, which were lying loose in the bladder. In searching for the cause of the obstruction it was easily found, and proved to be a stone impacted in the common duct. With the fingers upon the duct, over the stone, it was removed without much difficulty. The stones here presented are those removed; the sharp-pointed one is the one that was impacted in the duct. After passing a probe into the common duct and detecting no more stones, the gall-bladder was stitched to the upper end of the abdominal incision with interrupted sutures, and the remaining two inches of the abominal wound closed

in the ordinary way. As there had been quite extensive and firm adhesions to separate, I placed a glass drainage-tube in the abdominal cavity. A rubber drainage-tube was placed in the gall-bladder. There was very free bleeding from the edges of the edges of the abdominal wound and wound in the gall-bladder during the operation.

After the completion of the operation we placed the patient in bed, with no hope that she would ever rally. She regained consciousness very slowly. At 4 p. m., five hours after the operation, her pulse was 124; temperature, 99°; patient semi-conscious; dressing stained with blood and half ounce of blood removed from the abdominal drainage-tube; there was oozing of blood between all of the stitches. I then gave directions to the nurse that the drainage-tube should be pumped out every half-hour, and the wound carefully watched in reference to the bleeding, that we might make an intelligent estimate of how much blood was lost in a given time. Each inspection revealed increasing hemorrhage; so by the following day at 11 a. m., she was losing blood at the rate of two ounces every three hours. The loss of this amount of blood from one so feeble gave us no little anxiety, and the fact that it was increasing in quantity from hour to hour, instead of decreasing—as we naturally hoped—made the prognosis more grave still.

At 5:15 p. m. Monday, thirty hours after the completion of the first operation, the patient was bleeding as freely as at any time since the hemorrhage commenced. She was semi-conscious; pulse, 124, and very feeble; temperature, 98°. The blood came from between the stitches at the lower end of the wound below the gall-bladder, and from the abdominal drainage-tube. I could not tell whether the bleeding came from a point within the abdominal cavity, or from the edges of the abdominal incision. It was plainly evident the patient could not long survive if the bleeding could not be controlled. After a short conference with her husband I gained his consent to again open the adominal cavity to search for

the bleeding point. I was very anxious not to disturb the stitches which attached the gall-bladder to the abdominal wall, as there did not appear to be much bleeding from that part of the wound (only a little oozing between the stitches).

With the assistance of Dr. Stevens and Mr. Rice, a student in medicine, the patient was given an anæsthetic upon the bed, and the stitches removed from that portion of the abdominal wound below the gall-bladder. There was free bleeding from every portion of the edges of the wound. Around the glass drainage-tube in the cavity was considerable blood clot—perhaps two ounces. After sponging this out, I soon satisfied myself that the bleeding all came from the wound in the abdominal wall, and a part of it entered the abdominal cavity outside of the tube and was removed with the pump through it. After this fact was determined I at once removed the glass drainage-tube and closed the cavity by uniting the peritoneum only with a continuous suture of catgut. When this was accomplished I proceeded to close the rest of the wound in the following manner:

With a Hagedorne needle upon each end of a thread I passed one needle from within outward, including the whole thickness of the abdominal wall except the peritoneum, including a large bite of tissue, the needle coming out about one inch from the edge of the incision. The needle on the remaining end was passed in like manner on the opposite side; all the stiches were placed in the same manner, and about one-fourth of an inch apart; they were tied very tightly, thus making firm pressure upon the edges of the abdominal incision. This practically controlled the hemorrhage, yet the wound continued to bleed between all of the stitches for eight days longer but not more than two or three drachms a day.

The patient went through the second operation fully as well as the first. For fully a week her temperature was subnormal one or more times during each twenty-four hours. The highest point reached was 99.4° except once, when it reached 100°. There was a free and con-

stant flow of bile from the drainage-tube in the gall-bladder for eight or ten days, when it became intermittent. The tube was removed on the sixteenth day, and on the twenty-first day the sinus was closed. The cholæmia rapidly disappeared; a marked improvement could be observed on the third day after the operation. She complained of nausea but little after the third day, and vomited but twice after the operation was made. On the third day she retained liquid food, and after the fifth day she had a ravenous appetite.

The stools showed the presence of the bile from the first movement, which was on the fourth day.

On the twenty-eighth day she was able to go down stairs, and is now rapidly regaining her strength.

To summarize: The following special points can be emphasized in this case:

1. The complete success of surgical interfence in the almost hopeless condition of the patient.

2. The perfect success of the use of compression by means of very deep and firmly-tied sutures.

And here I may remark that had this failed to check the bleeding I would have cauterized the bleeding surface down to the peritoneum, dressing it as an open wound.—*The Times and Register.*

TWO CASES OF MALIGNANT DISEASE OF THE PHARYNGO-LARYNX AND LARYNX.

BY J. MORRISON RAY, M. D.,

Surgeon to the Eye, Ear and Throat Department of Sts. Mary and Elizabeth and Louisville City Hospitals.

Cancerous diseases of the lower pharynx and larynx is sufficiently uncommon to permit the report of two cases. These presented points of interest in their history and progress—not the least important of which was the extent of disease present when medical care was sought, and the rapidly fatal termination of each.

Case I.—Thomas ——, aged thirty-six, Englishman,

dog-trainer, came under observation at the Louisville City Hospital, March 1, 1888. He was a man of good physique, only slightly emaciated, with much difficulty in breathing, and aphonic. The dyspnœa was so great that Dr. Vance, in charge of the surgical wards, was asked to see the case at once with the intention of performing trachectomy. On my examining with the laryngeal mirror, the upper portion of the larynx was found to be filled with a large, irregular, warty mass, covered with mucus and pus. The pyriform fossa was filled with the growth, the epiglottis pushed far to the left and its right free edge involved. The chink of the glottis was overhung by the tumor. From the great effort required in breathing and the narrow space left through which air could enter, an immediate tracheotomy was demanded. This was performed by Dr. Vance under local hypodermic injections of cocaine. The relief from dyspnœa following introduction of the tracheotomy-tube was immediate. In a short time quiet sleep was procured. The next day he appeared bright and was breathing easily. The following history was obtained: He had suffered with some throat trouble for two months. The horseness increased rapidly, and for about two weeks there had been progressive difficulty in breathing. There had been no great trouble in swallowing until within a few days. No enlargement of the lymphatic glands in the neck, and no pain in the ear, or hemorrhage. The relief following the tracheotomy lasted only for three days, when respiration again became labored, and notwithstanding the introduction of a longer tube, he died on the sixth day with exhaustion from labored respiration.

The larynx and trachea, with the tongue attached, were removed by one of the internes. On longitudinal section a growth was found involving the entire right half of the larynx, extending on to the epiglottis. Below the lower edge of the growth the trachea was enlarged to nearly twice its normal calibre. The tissues surrounding the tracheotomy orifice were necrotic, but the orifice was not encroached upon by the neoplasm. Dr. Simon

Flexner kindly examined the growth microscopically, and reported that "it presented all the features of a typical squamous celled epithelioma. Notwithstanding its rapid proliferation the cellular elements were well formed and the cell-nests numerous, large, and strikingly perfect."

The local appearance of this tumor, when viewed through the laryngeal mirror, was that of an epithelioma, but the age, absence of glandular enlargement, hemorrhage, and only slight pain on swallowing led to the belief that it was a sarcomatous growth.

Epithelioma are the most frequently encountered of all growths in this locality. In Mackenzie's report of 53 cases of malignant growth involving the larynx proper, 45 were epithelioma. Of these only 6 occurred between the ages of thirty and forty. The question of extirpation was never considered in this case, since the tracheotomy did not prolong life as much as had been expected. Had the case been seen earlier in its progress and its nature recognized, tracheotomy, followed by extirpation of the right half of the larynx, might have added several years to his life. Mackenzie states that the average duration of life in epithelioma of the larynx is from eighteen months to two years. It is remarkable in this case for the growth to have existed so long and only within two months given rise to symptoms referable to the throat. The cartilaginous framework of the larynx was not involved in the growth.

Case II.—Dr. ——, retired physician, consulted me through the request of Dr. E. R. Palmer, in May, 1889. He had formerly lived in Kentucky, but for the past fifteen years had been a resident of Florida. Several years ago he had much trouble from recurring tonsilitis, but since his residence in the warm southern climate this had disappeared. In January, 1889, he began to expectorate considerable mucus, and he noticed an enlargement of one of the lymphatic glands beneath the angle of the jaw on the right side. When a young man he contracted syphilis, but underwent prolonged treatment, and had not

in forty years noticed sysptoms of the disease. The throat annoyance has gradually increased, and coming to Kentucky on business, he concluded to seek advice. He appeared somewhat exhausted, as he explained, from long travel, was always a man of slight flesh; nevertheless he had been strong before starting on his journey. His voice was clear, his swallowing was not painful, but very deliberate. Had suffered at times with darting pains in the right side of the neck, extending up to the ear. Breathing was free. On examination found nothing in the oro-pharynx. With the laryngeal mirror a mass was seen projecting from the right lateral wall of the pharynx above the entrance into the larynx. It was covered with pus, and was about three-fourths of an inch long and one-half of an inch in width, and protruded so as to interfere with the epiglottis during the act of deglutition. The lymphatic glands on right side of the neck are enlarged. The larynx could be seen, and no growth extending into it was discovered; yet the right half was partially fixed and the opposite vocal cord in its excursions passed beyound the middle line to the right. There was no family history of cancer. His father died at an advanced age and his mother still lives. The brothers and sisters that died had succumbed to acute diseases, three still living and healthy. One week after my first examination he was seen in consultation by Dr. Coomes, and with his assistance I removed with the laryngeal forceps a piece of the growth that made up about one-third of the projecting mass. In a few days another attempt was made, and the growth removed almost to a level with the walls of the pharynx. After these operations the glandular infiltration in the neck rapidly increased. Dr. D. W. Yandell was consulted as to the advisability of an operation from without, but he advised against external interference. The patient was also presented to the Medico-Chirurgical Society and question of a radical operation discussed, but the majority of opinion was averse to such proceeding. The growth soon again became prominent in the throat, and interfered with deglutition by obstructing the epiglottis.

The right arytenoid prominence became boggy and infiltrated, and the right cord fixed. Another operation with forceps and galvano-cautery was resorted to, after which deglutition was easier, but the glands in the neck rapidly enlarged after the operation, and extended from the parotid gland to the clavicle. They were very hard and growing more painful. August 1st he began to show well-marked signs of the cancerous cachexia, and soon went to the home of his family in this State, where he died August 30th from exhaustion, without signs of obstructed respiration. No autopsy. The pieces removed with the forceps at two different sittings were submitted to Dr. Simon Flexner for microscopical examination. He reported that "the portion removed at the first operation showed many embryonic elements and but few epithelial cells, with a total absence of alveolar structure. The pieces removed subsequently presented the appearance of typical encephaloid carcinoma. It seems that the first tissue examined was from the margin of the spreading growth and consisted of the so-called indifferent tissue, the precursor of carcinomatous invasion."

When this case was first seen and the history obtained, it was thought that it might be specific, and to clear up this doubt potass. iodide was given in increasing doses, but without effect. Later on, under the recommendation of Baratoux, the tincture thuja occidentalis (arbor vitæ) internally and locally was tried, but without effect on the rapidity of the extension or the excessive secretion, which had become a great annoyance.

Again, in this case the rapidity of the growth is at variance with the teaching of Mackenzie. He says the duration of life in encephaloid is three years. As to the frequency of growths in this locality, Lenox Brown says they are rare, but when present are usually encephaloid.

Remarks.—These two cases present different varieties of cancerous involvement of contiguous parts. One in a man thirty-six years of age, the other in a man of fifty-nine. They ran a much more rapidly fatal course than from the writings of others, we had been led to consider.

In neither case was there a history of hemorrhage or great pain until the last, at which time the second case required large doses of morphine to control the lancinating pains on the side of the neck, ear and head. In both cases the growth was on the right side. Fauvel states that from his observation the majority of malignant growths primarily in the throat are on the left side. Glandular infiltration in the neck was present in the case where the growth originated in the lower pharynx. In the other, where the larynx was the seat of the growth, at no time was there discovered gland enlargement. This observation is in accord with the statement of Krishaber, in that extrinsic cancer of the larynx (pharyngo-larynx) very early in its course produces glandular infiltration, while intrinsic cancer rarely induces cervical gland enlargement. In the case where gland enlargement was present it eventually became the most annoying symptoms, since it gave rise through pressure to intense pain. After each attempt at endo-pharyngeal removal the glands became rapidly larger. Newman, of Glasgow, has recently noticed the same effect, and therefore argues that on this account operations for removal through the mouth must not be attempted, but the growth should be removed by an operation from without. From careful observation of these two cases, I am led to believe that malignant diseases involving these parts are much earlier fatal than we are led to believe. Therefore, any method to be resorted to for their eradication must be done early, thoroughly, and preferably, by external incision.—*Medical Record.*

CHLOROFORM.

The following practical conclusions have been reached by the Second Hyderabad Commission:

I. The recumbent position on the back and absolute freedom of respiration are essential.

II. If, during an operation the recumbent position on the back cannot, from any cause, be maintained during chloroform administration, the utmost attention to the

respiration is necessary to prevent asphyxia or an overdose. If there is any doubt whatever about the state of respiration the patient should at once be restored to the recumbent position on the back.

III. To insure absolute freedom of respiration, tight clothing of every kind, either on the neck, chest, or abdomen is to be strictly avoided; and no assistants or bystanders should be allowed to exert pressure on any part of the patient's thorax or abdomen, even though the patient be struggling violently. If struggling does occur, it is always possible to hold the patient down by pressure on the shoulders, pelvis or legs, without doing anything which can by any possibility interfere with the free movements of respiration.

IV. An apparatus is not essential, and ought not to be used, as, being made to fit the face, it must tend to produce a certain amount of asphyxia. Moreover, it is apt to take up part of the attention which is required elsewhere. In short, no matter how it is made it introduces an element of danger into the administration. A convenient form of inhaler is an open cone or cap with a little absorbent cotton inside at the apex.

V. At the commencement of inhalation care should be taken by not holding the cap too close over the mouth and nose, to avoid exciting struggling or holding the breath. If struggling or holding the breath does occur, great care is necessary to avoid an overdose during the deep inspirations which follow. When quiet breathing is insured as the patient begins to go over, there is no reason why the inhaler should not be applied close to the face; and all that is then necessary is to watch the cornea and see that the respiration is not interfered with.

VI. In children, crying insures free admission of chloroform into the lungs; but as struggling and holding the breath can hardly be avoided, and one or two whiffs of chloroform may be sufficient to produce complete insensibility, they should always be allowed to inhale a little fresh air during the first deep inspiration which follows. In any struggling persons, but especially in children,

it is essential to remove the inhaler after the first or second deep inspiration, as enough chloroform may have been inhaled to produce deep anæsthesia, and this may only appear, or may deepen, after the chloroform is stopped. Struggling is best avoided in adults by making them blow out hard after each inspiration during inhalation.

VII. The patient is, as a rule, anæsthetized and ready for the operation to be commenced when unconscious winking is no longer produced by touching the surface of the eye with the tip of the finger. The anæsthetic should never under any circumstances be pushed till the respiration stops; but when once the cornea is insensitive, the patient should be kept gently under by occasional inhalations, and not allowed to come out and renew the stage of struggling and resistance.

VIII. As a rule, no operation should be commenced until the patient is fully under the influence of the anæsthetic, so as to avoid all chance of death from surgical shock or fright.

IX. The administrator should be guided as to the effect entirely by the respiration. His only object, while producing anæsthesia, is to see that the respiration is not interfered with.

X. If possible, the patient's chest and abdomen should be exposed during chloroform inhalation, so that the respiratory movements can be seen by the administrator. If anything interferes with the respiration in any way, however slightly, even if this occurs at the very commencement of the administration, if breath is held, or if there is stertor, the inhalation should be stopped until the breathing is natural again. This may sometimes create delay and inconvenience with inexperienced administrators, but experience will make any administrator so familiar with the respiratory functions under chloroform that he will in a short time know almost by intuition whether anything is going wrong, and be able to put it right without delay before any danger arises.

XI. If the breathing becomes embarrassed, the lower

jaw should be pulled, or pushed from behind the angles, forward, so that the lower teeth protrude in front of the upper. This raises the epiglottis and frees the larynx. At the same time it is well to assist the respiration artificially until the embarrassment passes off.

XII. If by any accident the respiration stops, artificial respiration should be commenced at once, while an assistant lowers the head and draws forward the tongue with catch-forceps, by Howard's method, assisted by compression and relaxation of the thoracic walls. Artificial respiration should be continued until there is no doubt whatever that natural respiration is completely re-established.

XIII. A small dose of morphia may be injected subcutaneously before chloroform inhalation, as it helps to keep the patient in a state of anæsthesia in prolonged operations. There is nothing to show that atropine does any good in connection with the administration of chloroform, and it may do a great deal of harm.

XIV. Alcohol may be given with advantage before operations under chloroform, provided it does not cause excitement, and merely has the effect of giving a patient confidence and steadying the circulation.

The commission has no doubt whatever that, if the above rules are followed, chloroform may be given in any case requiring an operation with perfect ease and absolute safety, so as to do good without the risk of evil.

EDWARD LAWRIE, (*President.*)
T. LAUDER BRUNTON,
G. BOMFORD,
RUSTOMJI D. HAKIM.
Members.

EDWARD LAWRIE, *Surgeon-Major*

HYDERABAD, Dec. 18, 1889.

Dr. Edwin Ricketts, Prof. of Gynecology, Cincinnati Polyclinic read a paper on Early Exploratory Incision as an aid to the Diagnosis of some Surgical Diseases of the Abdominal Cavity, at the recent meeting of the Virginia State Medical Society.

He had found it difficult in many cases to make a diagnosis previous to explanatory incision.

To open the abdomen was easy enough, but afterwards to do always the best thing and that promptly, knowing when to end at exploration; bearing in mind that half completed surgical proceedures are rarely ever excusable, requires skill and knowledge.

He did not deny that a diagnosis can be made previous to an incision in some cases, but in a majority we cannot make out with any degree of certainty until "Thomas like" we first see and feel the condition present.

He who claims that from the outside he is always sure of what is on the inside, is the one who is frequently to be placed in a humilitating attitude before his guests, and is liable to attempt the completion of an operation that may be wholly unwarrantable. The undue conservative physician with his free use of opiates has grave responsibiiities for the reason that his prompt efforts for the relief of pain too often postpone the recognition of needed surgical interference.

He reported briefly, eleven cases, coming under his observation, where exploratory incision was necessary to diagnosis.

CATGUT IN ABDOMINAL SURGERY.

Dr. Robert T. Morris, of New York, in a recent paper upon this subject, states, that in his opinion, silk, silver, wire and silk-worm gut are all inferior to catgut. The reasons surgeons so often prefer silk is that they have used gut made by some unreliable manufacturer for the market. Except for wiring of bones he never uses anything but catgut in general surgery.

He uses Kocher's method of preparing it, as it is always best to prepare the gut yourself.

By this method you buy bunches of raw catgut, sizes 5, 7 and 9.

Place it in the oil of juniper berry for a few days, to dissolve out the fixed oil and kill micro-organisms. It may be allowed to remain as long as desired, but four or

five days is sufficient. Upon taking out of the oil it is placed in large-mouthed bottles containing alcohol 95 per cent., with the Bichloride of Mercury in the proportion of four grains to the pint. This is about a 1-2000 solution. The catgut will retain its strength for an indefinite period in this solution.

The No. 9 catgut prepared in this way is absorbed in about six days. It should be used for ligating small vessels, for intestinal suturing, and for skin sutures where there is not much tension.

The No. 7 catgut is absorbed in about twelve days. It should be used for ligating large vessels, for skin sutures, for peritoneal sutures, for general intra-abdominal ligating, and for sutures upon the cervix and vagina.

The No. 5 is absorbed in about eighteen days, and may be used for approximating fibrous structures.

If it is wished to make a catgut that will resist absorption longer than this, take it out of the alcoholic solution of the Bichloride and immerse it in a five per cent. watery solution of carbolic acid, to which has been added bichromate of Potash, fifteen grains to the pint. Leave the gut in this for forty-eight hours and then put it back in the alcohol again. After this treatment it will resist absorption about twice as long as before.

Dr. Morris reports an interesting list of abdominal cases in which gut was used exclusively, demonstrating its value.—(*Annals of Gynæcology and Pædiatry.*)

TREATMENT OF DISEASES OF WOMEN IN SANITARIUMS.

Dr. Jas. K. King, of the Glen Springs Sanitarium, calls the attention of the profession to the great advantage of the treatment of diseases of women in scientifically conducted sanitariums. It is not necessary that those sanitariums should be large buildings, but the object is to keep the patient under the direct control of the physician, and to have at hand apparatus and instruments for proper treatment. With pleasant surroundings, patients will take more fresh air, and if in conjunction with exer-

cise, massage, electricity and baths are employed, the patients are often relieved of congestions which otherwise could not have been done.

A different dress can also be worn, relieving the patient of the heavy dragging of unnecessary skirts, and in this way the entire habits are changed for the good. (*Annals of Gynecology and Pediatry.*)

TUBERCULOSIS.

At the recent International Medical Congress held in Berlin, Prof. Koch stated that he thought it would not be long before a specific for Tuberculosis would be found. He bases his opinion upon experiments upon fowls and small animals.

He finds that the power of the tubercle bacillus to propagate, is stopped by a one one-millionth solution of chloride of gold and nitrate of silver, and probably by other metallic salts. It is possible by so giving the chloride of gold in small doses, it might have a beneficial effect upon the human organism, at the same time stop the growth of the bacilli. Coming from such a man as Koch, these views must certainly be received with a great deal of interest.

PERITONITIS.

Dr. Joseph Price, of Philadelphia, says in a recent article that with pus in the abdomen, no matter from what cause, there is nothing to be done but to remove it. No case of general puerperal peritonitis will recover without an operation. Operations should, however, take place upon the first discovery of such, as delay is fatal. Slight inflammatory changes strictly local may be treated otherwise but as soon as the trouble becomes general an abdominal section should be done.

He reports four cases of puerperal fever, of peritonitis, in which he performed laparotomy and the patients all recovered. Of course irrigation and drainage should play an important part in these cases. In one of his cases he operated twelve days after labor with success. He also reports three cases of extra uterine pregnancy which he operated upon. In his opinion electricity in these cases is useful when it is not needed, and its success is only apparent.—(*Annals of Gynecology and Pediatry.*)

Summary of Meteorological Observations

MADE AT

THE UNITED STATES SIGNAL SERVICE STATION, WINYAH SANITARIUM, ASHEVILLE, N. C.

Elevation above Sea, 2,350 feet. Latitude 35.36 N. Longitude 82.26 W. Hours of Observation, 7 A. M., 2 P. M., and 9 P. M.

Self-registering maximum and minimum thermometers. Instruments exposed in standard U. S. Signal Service Shelter. Barometric reductions for altitude and temperature at 32°F averages about 2.5 inches. Ozone observations after method of Negretti and Zambra.

SEASON.	MONTH.	Mean Temperature.	Mean Max. Temperature.	Mean Min. Temp.	Absolute Max. Temp.	Absolute Min. Temp.	Mean Daily Range Temp.	Mean Relative Humidity.	Mean Absolute Humidity.	No. Clear and Fair Days.	No. Cloudy and Rainy Days.	No. Days without Sunshine.	No. Days on which 0.10 or more Rain fell.	Total Amount of Rain and Melted Snow, in Inches.	Snow Fall in Inches.	No. of Days on which 0.10 or more snow fell.	Mean Barometer corrected for Altitude and Temp.	Direction of Prevailing Winds.	Mean Force of Wind on Scale of 0 to 6.
Winter of 1888-1889.	November	48 40	60 12	40 96	69 50	28 40	19 16	64 20	2 214	23	7	2	.....	3 49	0	0	30 18	NW	1 88
	December	41 50	54 10	36 66	62 40	22 10	17 44	62 80	2 014	25	5	1	.....	2 94	0	0	30 20	NW	1 40
	January	38 50	48 00	29 30	59 80	13 00	18 70	66 30	1 966	24	6	2	9	2 59	0 20	1	30 21	N&NW	0 94
	February	37 00	46 73	26 00	69 50	6 50	20 73	55 60	1 894	24	4	1	4	1 68	4 54	4	30 27	N&NW	1 18
	March	45 00	55 44	35 72	72 80	21 20	19 72	58 40	2 120	25	5	0	7	0 43	.0	0	30 16	N&NW	1 06
	April	56 38	67 74	44 12	83 00	28 50	22 66	53 44	2 754	25	5	0	7	1 45	0	0	30 08	N&NW	1 90
	Total	266 78	332 13	212 76	417 00	120 10	118 37	360 74	13 062	147	32	6	27	12 53	4 74	5	181 10		8 36
	Mean for Winter Ms.	44 46	55 35	35 46	69 50	20 10	19 73	60 12	2 177	24 5	5 3	1	6 5	2 09			30 18	NW	1 39

KARL von RUCK, B. S., M. D., Director of Observatory.

C. P. AMBLER, M. D., Observer.

UNITED STATES SIGNAL SERVICE STATION, WINYAH SANITARIUM, ASHEVILLE, N. C.

SUMMARY OF OBSERVATIONS FOR SEPT, 1890.

(For the Asheville Medical Review.)

	7 A. M.	2 P. M.	9 P. M.	DAILY MEAN.
Monthly mean Temperature	61.08	72.46	64.38	65.53
Relative Humidity	89.43	59.83	84.57	77.94
Absolute Humidity	5.409	5.296	5.646	5.467
Barometer (Reduced to sea level at 32°)	30.20	30.13	30.18	30.17

Maximum Temperature	86.0.	Mean	78.31
Minimum Temperature	49.8.	Mean	59.29
Mean Monthly Range Temperature	17.91 F.		
Mean Daily Variation Temperature	2.65 F.		
Total Rainfall for Month	3.86 inches.		

No. of clear days, 19. No. of fair days, 6. No. of cloudy and rainy days, 5. Ozone—Per cent. of possible 100—Mean for the month, 38.5 per cent.

KARL von RUCK, B. S., M. D., Director of Observatory.

C. P. AMBLER, M. D., Observer.

BOOK REVIEWS.

Proceedings of the Eleventh Annual Meeting of the North Carolina Pharmaceutical Association, Morehead City, 1890.

This is very neat pamphlet of 72 pages, containing the records of a successful meeting of the North Carolina druggists. Quite a number of short practical and scientific papers are published which give the volume a value beyond its mere historical interest. The Report of the North Carolina Board of Pharmacy gives the names of the successful candidates for license to practice pharmacy in the State, and shows that the Board successfully prosecuted one individual for attempting to practice without license. This is as it should be, and every law should be enforced that will guard the people from ignorance, whether of druggist or physician.

A Natural Method of Physical Training.

By Edwin Checkley, W. C. Bryant & Co., Brooklyn, N. Y., 1889, cloth $1.50 postpaid.

This is just what it is claimed to be, a natural method of physical training. It is written by a man who knows

his business, and who starts out from the first with an object in view, to give the common sense of bodily exercise, and who accomplishes his end. It is written in a pleasing style and is so written that "one who runs may read." By following his instructions one will get rid to a great extent of many of the ills that flesh is heir to. At the same time he does not offer his book as a substitute for the physician, but all through evinces a proper respect for the medical profession. He does not teach one to become an athlete so much as to become healthy.

Any one sick or well, sedentary or active, will be benefitted by reading so wholesome and healthy a book.

F. T. M.

PAMPHLETS RECEIVED.

Cleanliness in Maternities. By Joseph Price, M. D.

Hip Joint Disease with Cases. By S. L. McCurdy, M. D.

A Retrospect of Abdominal Surgery. By Joseph Price, M. D.

The Treatment of Compound Fracture. By S. L. McCardy, M. D.

Pus in the Pelvis and how to deal with it. By Joseph Price, M. D.

The Mechanical Treatment of Synovitis. By S. L. McCurdy, M. D.

Rachitis, With Osteitomy for Resulting Deformity. By Willis W. Hall, M. D.

The Past, Present and Future of Abdominal and Pelvic Surgery. By Joseph Price, M. D.

Report of a Case of Partial Laryngectomy for Carcinoma of the Larynx. By Max Thorner, M. D.

The Ophthalmoscope as an aid in the Diagnosis of the Central Nervous System. By J. Morrison Ray, M. D., Louisville, Ky. (*Reprint: American Practitioner and News.*)

Two Cases of Malignant Disease of the Pharyngo-Larynx and Larynx. By J. Morrison Ray, M. D., Louisville, Ky. (*Reprint from the Medical Record.*

The Climatic Causation of Consumption, with Tables and Diagrams Representing the Same. By Henry B. Baker, M. D., Lansing, Mich. (*Reprint from the Journal of the American Medical Association.*

Illinois State Board of Health. Report on Medical Education, Medical Colleges and the Regulation of the Practice of Medicine in the United States and Canada. 1765—1890. By John H. Rauch, M. D. Secretary.

DIOVIBURNIA

UTERINE TONIC. ANTISPASMODIC AND ANODYNE.

A reliable and trustworthy remedy for the relief of Dysmenorrhœa, Amenorrhœa, Menorrhagia, Leucorrhœa, Subinvolution, Threatened Abortion, Vomiting in Pregnancy and Chlorosis: directing its action to the entire uterine system as a general tonic and antispasmodic.

DIOVIBURNIA is prepared for prescribing exclusively, and the formula will commend itself to every intelligent physician.

FORMULA.

Every ounce contains ½ dram each of the fluid extracts: Viburnum Prunifolium, Viburnum Opulus, Dioscorea Villosa, Aletris Farinosa, Helonias Dioica, Mitchella Repens, Caulophyllum Thalistroids, Scutellaria, Dateriflora.

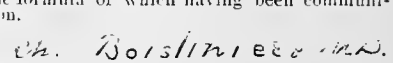
DOSE.—For adults, a dessertspoonful to a tablespoonful three times a day, always in HOT WATER.

Jno. B. Johnson, M. D., Professor of the Principles and Practice o Medicine, St. Louis Medical College:

I very cheerfully give my testimony to the virtues of a combination of vegetable remedies prepared by a well-known and able pharmacist of this city, and known as DIOVIBURNIA, and therefore have no relation to proprietary or quack remedies. I have employed this medicine in cases of dysmenorrhœa, suppression of the catemenia, and in excessive leucorrhœa, and have been much pleased with its use. I do not think its claims (as set forth in the circular accompanying it) to be at all excessive. I recommend its use.

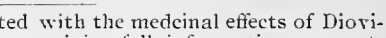
L. Ch. Boisliniere M. D., Prof. Obstetrics, St. Louis Medical College:

I have given DIOVIBURNIA a fair trial and found it useful as an uterine tonic and antispasmodic, relieving the pains of dysmenorrhœa, and regulator of the uterine functions. I feel authorized to give this recommendation, as it is neither a patented nor a secret medicine, the formula of which having been communicated freely to the medical profession.



H. Tuholski, M. D., Professor Clinical Surgery and Surgical Pathology, Missouri Medical College; also Post-Graduate School of St. Louis:

I have used DIOVIBNRNIA quite a number of times—sufficiently frequently to satisfy myself of its merits. It is of unquestionable benefit in painful dysmenorrhœa.



To any physician, unacquainted with the medcinal effects of Dioviburnia, we will mail pamphlet containing full information, suggestions, commendations of some of the most prominent practitioners in the profession; also a variety of valuable prescriptions that have been thoroughly tested in an active practice, or to physicians desiring to try our preparations, and who will pay express charges, we will send on application a bottle of each free.

DIOS CHEMICAL CO., ST. LOUIS, MO., U. S. A.

THE ASHEVILLE
Medical Review.

Vol. 1. Asheville, N. C., November 15, 1896. No. 4.

ORIGINAL ARTICLES.

VAGINAL EXTIRPATION OF THE UTERUS FOR CANCER, WITH REPORT OF ELEVEN CASES.

BY CHARLES A. L. REED, M. D., CINCINNATI.

Surgeon to the Cincinnati Free Hospital for Women; Professor of Gynecology and Abdominal Surgery at the Cincinnati College of Medicine and Surgery.

It is so clearly the duty of surgeons to present their views upon life-saving operations and to report their experience with the same, that I offer no apology for discussing the general subject of hysterectomy for cancer. Nor for presenting brief summaries of eleven cases of total removal of the womb—nine for cancer, two for sarcoma.

Reports of this kind are the more important just now because, under the defective methods of operating inaugurated by Freund, the mortality was so great that the profession, very correctly and with practical unanimity, denounced the procedure as unwarrantable. The methods of Freund, and the mortality to which they gave rise, have fortunately passed away, but the prejudices to which they gave rise have, unfortunately, remained. It is, therefore, difficult to get an impartial hearing for results which are being obtained by the more refined technique of today. Exacting critics, actuated too often by a desire to uphold some operation with which their names may have become identified, demand results which would imply nothing less than placing the awful significance of malignancy at naught.

The more advanced, but no less conservative element of the profession, is, however, giving expression to views which may be summarized as follows:

1. Cancer of the womb, if not treated, is uniformly fatal.

2. Treatment, to be effective, must involve removal of all the cancerous tissues.

3. Removal of all the cancerous tissue can be assured only by early operation and removal of all the womb.

4. The best results are not now obtained, because attending physicians too frequently fail to advise early operation, and because operating surgeons are often too diffident about undertaking interference.

5. The best results, primary and ultimate, will be obtained when attending physicians advise early operation, and when surgeons will co-operate with them by removing all the womb.

6. The result already obtained by surgeons of experience with this operation justify the submission of every case, in which the disease is not too far advanced, to vaginal total extirpation of the uterus.

In asking you to accept the foregoing propositions (which I feel that I have appropriated largely from the utterances of others) as my thesis for this occasion, I must ask your pardon for presuming to discuss principles which, with most of you, have passed into well-recognized canons of surgery.

The uniform fatality of malignant disease of the uterus, when not treated, is uniformly conceded. The only cases in which untreated cancer of the womb does not destroy life are those in which some intercurrent disease deprives it of the opportunity. That treatment to be effective, must involve removal of all the cancerous tissues has long since passed into an axiom of surgery. This primary principle is based upon the power of endogenous multiplication inherent in cancerous growths, and upon the power of those cells to progressively invade the normal matrix.

The proposition that the removal of all the cancerous

tissue can be assured only by early operation and removal of all the womb, raises one of the important and determining questions involved in the general controversy over hysterectomy. The removability of cancerous tissue depends upon the primarily local origin of the neoplastic change. The view now generally, I may say almost unanimously accepted, and the one upon which I confidently based my practice, is that advanced by Waldeyer, and confirmed by Tait, viz: that cancer is primarily of epithelial, and consequently of local origin. This point settled, the next pathological factor, bearing upon the question of treatment, refers to the method by which the disease progresses. I believe that the consensus of opinion to-day, among the most extensive and careful observers, is that cancer of the uterus advances by progressive invasion of tissue rather than through either the lymphatic or hæmic circulations. That the lymph channels and glands are not generally involved in these cases depends upon the well known fact that the lymphatics of the uterus, although existing in abundance, are physiologically inactive in the non-gravid womb; and that the blood vessels do not generally serve as highways of trust in the propagation of cancer is accounted for by the peculiar histological conformation of these growths. If, now, cancer is of local origin and advances by progressive invasion of normal tissue, the logical indication, particularly in cases beginning in the neck of the womb, would seem to be to excise the tissues just beyond the point of involvement, and thus practice high amputation of the cervix. This brings me to a review of the latter operation considered as an alternative for total extirpation through the vagina.

In four of my cases (Nos. 1, 2, 6 and 8) careful examination before the operation failed to indicate extension of the disease beyond the cervix, and consequently presented what are now taken as indications for high amputation; yet the specimens show that nothing short of the radical operation could by any means have effected the removal of the malignant tissue. The case reports that

come from other operators abound in simil r instances. It may be urged that the fact of the further extension of the disease can be determined at the same sitting, and that a high amputation can be converted into total extirpation should the conditions warrant; yet every pathologist knows that the upward extension of cancer, although it be by progressive invasion of tissue, often cannot be determined by microscopic appearance. To hold a patient under an anæsthetic while a section is cut and a microscopic examination is made, is too absurd a proposition to merit mention. My first objection, therefore, to high amputation is that it is unsurgical, for the reason that it fails to furnish the completest assurance that all the malignant tissue has been removed, and consequently fails to furnish the best guarantee against return of the disease.

The condition of the womb after high amputation of the cervix is essentually that of a mutilated and consequently disabled organ, but one that is nevertheless, liable to have imposed upon it those functions, the exercise of which so frequently prove disastrous to healthy action. This fact was developed in the discussion of the papers by Dr. Martin and myself at the recent meeting of the American Medical Association at Nashville, when Dr. Reamy reported the case of a woman from whom he had removed a cancerous cervix seven years ago. This patient is still living and has two healthy and happy children, a fact which could not have occurred had total extirpation been practiced, and which the distinguished gentleman urged as an objection to the latter operation. In thus urging the possibilities of maternity in these cases Dr. Reamy adroitly obscured its probabilities, for it should be remembered that whether the disease returns or not, a cicatricial band forms at the point of amputation; that this band is hard and inelastic, and that, in the event of conception and subsequent delivery, laceration rather than dilation must take place. The sequel is generally a tragedy.

This condition and its disastrous consequences are

fairly indicated in a letter to me from one of the ablest practitioners in the State of Indiana. For obvious reasons I withhold all names, although I am at liberty to use them at my discretion. After speaking of the pains taken in being accurate, my correspondent gives the following succinct history:

"Mrs. H., 34 years of age, wife of a U. P. clergyman, patient of Dr. W.; family history unknown to me. Was never robust, never pregnant, menses regular, although sometimes painful. Was treated by Dr. W. at times during late spring and summer for excessive menstruation. The bleeding became, by the middle of July, so great and now occurring without causation, that is, not at menstrual periods, that the doctor made an examination in August, and found bleeding nodules upon the cervix. Treatment was of no avail, and bleeding continued so that sometime in October she was sent to Cincinnati with a letter to Dr. ——. Epithelioma was diagnosticated and operation advised. Consent was given and Dr. —— came here intending to do vaginal hysterectomy, but instead did high amputation, on November 13, 1888. Present and assisting were—" (four physicians of the town.) "Now, right here," continues my correspondent, "comes in a curious thing in point of diagnosis and treatment. Observe that this operation was done November 13th. In the letter, which this patient carried to her consultant, attention was called to the fact that somewhere in September, 1888, this woman had suddenly and unexpectedly and without regard to treatment *caused to bleed*, and asked if this did not throw light on the diagnosis of cancer. Thus for the space of six or seven weeks a woman with a cancer of the cervix did not bleed until the moment of operation.

"She was instructed to visit her surgeon in ten or eleven weeks after the operation, which she did. Not having menstruated or bled one drop since the operation, the question was raised, could she possibly be pregnant? This proved to be the case, and she had splendid health on up to her labor, which began June 20, 1889, with her

local physician in attendance. Palpation showed undoubted contractions of the womb, apparently at full term. Digital examination revealed—*a blank!* No cervix. No os, no opening, nothing save a thick mass of cicatricial tissue over the lower end of the womb, and vertex presentation. At the end of twenty-four hours still no signs of an opening. The doctor now incised the point that seemed to bulge the most for an inch and a half, slight bleeding followed. This was of no avail, and after twelve hours he enlarged this incision. He now had consultation, and between them they incised several times at the point of this gristle that seemed to be on the greatest strain. At last they made the passage large enough to allow the head to pass. Forceps were then applied, and labor completed June 24, 1889, at 9:15 a. m. The patient had already had one chill, soon followed by a temperature that went to 106° F. She had another immediately after delivery. Septic peritonitis and death on June 27, at 9 a. m. The child had died several hours before delivery."

If, now, we lay aside the doubt as to diagnosis, for seven weeks' cessation of hemorrhage under the influence of pregnancy is scarcely consistent with the history of cancer; if we ignored the existence of pregnancy before the operation, for we are now taught that conception may and does take place after high amputation of the cervix; if we shut our eyes to the blunder in delivery, for clearly a Porro operation should have been done at the very onset of labor—I say, if we ignore all this, we are yet forced to the conclusion that it was the condition at the base of the uterus, consequent upon the operation, that caused, primarily, the impediment to delivery, and, secondarily, the death of both mother and child. This tragic case, and the possibilities which it exemplifies, confirm me in my opposition to high amputation of the cervix, particularly when it is remembered that Goodell has had occasion within the last year to do a Saenger-Cæsarean section in a case of cancerous cervix.

and that Thomas, Spencer Wells and Bischoff are reported to have had similar experiences.

That the best results are not now obtained from the average operator, because of the delay in bringing these cases to operation, is proven by my own limited experience of eleven cases, viz:

CASE 1. *Aet.* 37; married; two children; had shown evidences of disease for five months previously. The anterior lip of the cervix was first involved, but at the time of operation the whole cervix was carcinomatous. The operation was done Nov. 20, 1887. I controlled the hemorrhage by ligatures and small haemostatics; the recovery was prompt: no recurrence. Dr. J. G. Reed, attending physician.

CASE 2. *Aet.* 48; married; one child. Gave a history of the disease for sixteen months previously. Examination showed that it was confined to the endometrium. Dr. Thacker made the section and pronounced it "medullary cancer." Operation Jan. 11, 1888; adhesions extensive; clamps were used. Recurrence after twenty months. Dr. Elwell, of Saco, Maine, reports the case in rapid decline from return of the disease. Dr. W. F. Taylor, attending physician.

CASE 3. *Aet.* 32; widow; one child; four months previous duration of the disease. Primary seat of disease (carcinoma) in an old laceration of the cervix. Operation April 1, 1888. Clamps. Fistula in fundus of bladder, the result of separating high adhesions, was closed by subsequent operation. Recovery perfect and permanent to date. Dr. W. F. Taylor, attending physician.

CASE 4. *Aet.* 41; married; three children; bloody discharges for previous 13 months occurred almost without cessation. The entire cervix and lower one-third of the body carcinomatous. The patient was almost exsanguine when operated upon at St. Mary's Hospital, in October, 1888. Clamps. The shock was intense and the patient was too bloodless to react. Death from shock within three hours after operation. Dr. Johnston, attending physician.

Case 5. *Aet.* 47; married; six children. Six months previous duration of the disease. The entire cervix was involved, the carcinomatous infiltration involving the lower segment of the body. Operation Dec. 16, 1888. Clamp. Patient is now well. Dr. C. A. L. Reed, attending physician.

Case 6. *Aet.* 32; married; one child. Seven months previous duration of the disease. Cervix and lower third of the body were involved. Operation October 5, 1889, at the patient's residence, Jamestown, New York. Recovery. Dr. H. P. Hall, attending physician.

Case 7. *Aet.* 42; married; four children. Eight months previous duration of illness. Operation December 20, 1889. Recovery. Dr. J. J. Strecker, attending physician.

Case 8. *Aet.* 57; widow; ten children. Six and one-half months observed previous duration of the disease, which involved the endometrium from the external os to near the fundus, and was carcinomatous in character. Operation Feb. 12, 1890. Preliminary lateral ligatures to the broad ligament, and subsequent application of the clamps. This case progressed favorably until all surgical conditions were practically overcome, when she sustained an electric shock from a flash of lightning. She was immediately found paralytic, and died in nine hours. The circumstances of death in this case warrant me in excluding it from the list of fatalities due to the operator. Dr. Fennell, attending physician.

Case 9. *Aet.* 40; single; nine months previous duration of the disease. The cervix was carcinomatous, and at the time of the operation, April 7, 1890, it was also discovered that the disease had invaded the broad ligament. When I discovered this complication, I would have converted the operation into a high amputation, but I was forced to remove the womb as the only way of controlling the hemorrhage. This patient made a prompt primary recovery, although the disease was not entirely removed, and has since become active. Dr. J. H. Tate, attending physician.

Case 10. *Aet.* 67; married; four children. Previous duration of disease eighteen months, and involved the entire cervix to the vaginal juncture. The operation was done April 26, 1890, was nearly bloodless, and consumed but twenty minutes. Clamps were removed in due season, and the bowels were moved. In the second week, however, for some inexplicable cause, the patient developed peritonitis and died. Dr. W. D. Hancock, attending physician.

Case 11. *Aet.* 40; widow; one child. Disease of four months previous duration. Operation at the Cincinnati Free Hospital for Women, April 28, 1890. A fecal fistula occurred on the seventh day, and persisted for a while, when it closed spontaneously. Dr. C. L. Armstrong, attending physician.

Having now, as I think, established the fourth proposition, let me give attention to the fifth; but before taking up the final possibilities of the operation for which I contend, permit me to present a few more points which shall contrast it with the procedure which I look upon as essentially defective and unsurgical.

A final objection that I have to urge against high amputation as opposed to total extirpation is the fact, demonstrated by the records of ample experience, that the former is primarily a more dangerous operation. This, I know is contrary to the usually received preconceptions, not opinions, of the profession. Yet the testimony is conclusive in establishing the opinion which I urge. I know that the figures of Hofmeier and Schroeder relative to the final results in these cases, are usually taken to establish the fact that the primary results are more satisfactory in the cervix operation, but they are not honestly capable of this construction. It is true that these figures give 136 high amputations and 74 vaginal hysterectomies; at the end of four years 43.3 per cent. of the partial removals were well, while all the total extirpations were dead. These figures have no significance whatever to-day, except as evidence of the fact that these operators gave all the early cases to partial removal, and

all the advanced ones to total extirpation—a most unfair discrimination. More recent observers on the point show conclusively, that the total removal in suitable cases is followed by satisfactory ultimate results. Thus Olshausen, 1886, reports four cases without relapse, ranging up to within a month of three years. Dr. Cullingworth,* after a careful study of vaginal extirpation, in Germany, and high amputation, in England, averred that the primary mortality from removal of the womb was two per cent. less than that from the so-called minor operation, the figures being five and seven per cent. respectively, and Professor Sinclair if even more radical in his views.

The progressive improvement in vaginal hysterectomy is shown in the following table of collected cases:

		Cases.	Per cent. Mortality.
1881.	Olshausen.	40	29
1883.	Engstroem.	157	29
1883.	Saenger.	133	28.6
1886.	Hegar and Kaltenbach.	257	23
1890.	Martin (F. H.)	134	14

This table points with emphasis to the possibility of the almost pefect results which have been demonstrated by Kaltenbach, who, at the recent Hegar celebration reported 62 consecutive cases with but two deaths, giving a mortality of but 3.2 per cent.

With such demonstrated results, I feel that I am justified in formulating a principle of practice which shall read, that every case of cancer of the uterus in which the disease is not already too far advanced, should be subjected to total extirpation of the diseased organ through the vagina.

*London Lancet, May 17, 1890.

NASAL STENOSIS AND SOME RESULTS.

BY C. P. AMBLER, M. D.

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Before entering upon a discussion of Nasal Stenosis, it would be well for us to review, hastily, some of the fundamental physiological functions of the nares.

There is no part of the human economy which has received not more scientific treatment. This has occurred because the functions of the nose have, up to the past year or two, been greatly overlooked, and the methods of examination are not used nor understood, except by those dealing specially in Nasal troubles.

If we refer to the physiologies of a few years back we find the foremost function of the nasal cavities given as an orifice for respiration, and secondly as olifaction. Now while olifaction to the laity may, and does, undoubtedly seem *the function* of the nasal chambers, the work of our late authors, especially some of the prominent Rhinologists of the present day, proves the existence and performance of a far greater function than "olifaction," viz.: the preparation of the air for the lungs. Without olifaction we would be crippled indeed, the sense of taste would be greatly impaired and we would lose a very sensitive guard against the entrance of foreign bodies and noxious gases, dusts, etc.

But admitting that the nasal chambers have the means for saturating the inspired air with moisture, of bringing it to a standard temperature near that of the body, of on a second's notice so changing the contour of the cavities that air filled with dust or foreign matter must pass through a greatly narrowed and tortuous passage, straining out, so to speak, the obnoxious material and making the air pure and of such a temperature and humidity as the lungs require; remembering that in physiological respiration we are constantly breathing through the nose, do not these latter functions far overbalance the simple sense of olfaction?

Later physiologists say yes, and while many will be slow to accept this thing, a little thought and study will show that it is of great importance.

Kirk, in his physiology, says the lungs give off from six to twenty-seven ounces of water daily. He without doubt means the exhaled air contains this amount, overlooking the exosmotic function of the nasal mucous membrane. He further adds, the lungs give off enough heat to raise the temperature of the inspired air to nearly that of the blood. This statement is made also without regard to the nasal function.

Speaking of Stenosis in a relative way I believe then it is a physiological as well as well as a pathological condition. All bony, cartilaginous, fibrous, polypoid or adenoid enlargements, muscular paralysis and structural changes due to inflammatory action, whether traumatic or idiopathic would of course be pathological.

When we come to the turbinated bodies we can have a condition of stenosis partial or almost total, which should not always be regarded as pathological.

The mucous membrane covering the turbinated bones (notably the inferior) and the underlying structures, is largely made up of blood vessels. Since Bigelow demonstrated the true erectile tissue of these bodies this action has been better understood.

Bosworth, however, in his recent admirable work on the nose and throat, (page 98) refuses to accept that they are true erectile bodies. He says: "Certainly if nature intended that they should swell out and thereby occlude the nasal passages to prevent the entrance of foreign bodies, thus compelling the opening of a far more vulnerable tract through the mouth, nature has been guilty of an awkwardness of design which presents no analogy in the whole human economy. Furthermore, they never become erect in health and disease."

Mackenzie claims very emphatically, they do "swell up and retard the entrance of foreign matter and bodies."

After carefully watching a large number of turbinated bodies, I have from observation alone come to the con-

clusion they do under stimulants, both in health and disease, swell up, and by making the canal more tortuous and narrow, giving off moisture and heat preform a great physiological function.

The stimulant may be a foreign body and may not. Having been making observations of the humidity of the air at the United States Signal Station at Winyah Sanitarium, for the past two years, and seeing every day a large number of turbinated bodies, I have become thoroughly satisfied that the humidity of the air alone exerts a marked influence over the size of these bodies.

The humidity in the morning, other things being equal is always greater than at 2 p. m. Now the nose which at 7 a. m., may present a fairly free opening, the humidity being say 70 or 80, will, if examined, at 2 p. m., with humidity of, say 40 or 50, present a much smaller lumen.

Can we call this a pathological stenosis? Not at all. In the morning the air being near saturation, nature is relieved of part of her work, while at 2 p. m., she has to furnish a much greater circulation, to give off the increased amount of water necessary to saturate the air.

Bosworth, says the function of these bodies is to give off moisture. How can nature furnish more moisture at one time than another without increased circulation? How can she furnish increased circulation, locally, without enlargement of vessels by vaso-motor influence? Does not enlargement of vessels by increased amount of blood constitute the main part of erectile tissue?

As to the degree of enlargement, nature could easily have enough influence over the parts, through the vaso-motors, to cause the increased blood supply, without going to the extreme, mentioned by Bosworth, and causing such occlusion as to necessitate mouth breathing.

Other stimulants act the same way. Blow a spray of powder into the nose and closely observe the membrane, immediately increased circulation, to prevent entrance of more and to wash away, by the increased exudation of liquid, the already offending material.

Nature surely has in these ever elert, sensitive and

abused membranes, guards to her laboratories below, which for execution of duty will rival any guard that ever stood duty at a palace.

A chronic rhinitis is often relieved simply by a change of climate. One suffering from rhinitis at the sea level or where the humidity is high, will particularly see a change when going to a dry climate and moderate altitude, such as we have at Asheville.

Again, one aquiring a rhinitis in a dry climate, will get relief from a moist locality in precisely the same manner, by a change of the circulation in parts.

The membrane thickened from chronic inflammatory changes, or congestion, as the word is used here, would of course not respond to any such mild stimulation. Likewise, the atrophic membrane.

There is no doubt in my mind that caustics such as chromic, trichlor-acetic and nitric acids or the galvano-cautery are often applied to these membranes, when they are only preforming the function for which they were devised.

This readily explains the wonderful results that some have had with a certain acid, after making one or two applications.

It is a very easy matter to "bring down" these bodies when in a physiological state. There is too much being done in this line without proper regard to the physiology of the parts.

We read too frequently of hypertrophy of the turbinated bones and bodies. True cases of hypertrophy of the bones are much more rare than commonly thought.

By spraying with a 5% solution of cocaine our "bony hypertrophy" will have disappeared or merged into a cartilaginous thickening.

A normal turbinated body does look, to one unacquainted with the inspection of the organ, similar to an inflammatory enlargement or hypertrophy of some kind.

We do have a hypertrophy of these membranes, which can be readily accounted for. A person having a low grade of chronic rhinitis, perhaps unbeknown to him, frequently exposes himself and takes cold. This cold

will show up at some weakened point of the mucous membrane, where such as stenosis presents. An enormous dilation of the blood vessels of the part results, hypernutrition and changes in the structure of the blood vessels and surrounding tissue follow the continued repetition of this congestion.

Such changes retard the free physiological action, and such cases of enlarged turbinated bodies cause partial or total stenosis, and should be treated.

Structural deformities can be caused at the time of birth, especially where the pelvis of the mother is deformed.

Mackenzie, vol. II, page 119, says: "It is possible that the delicate skeleton of an infant's nose may be irretrievably damaged, by the blade of the forceps in child-birth.

A thorough examination may reveal nothing, and again may show us that which if neglected, will necessitate an operation at a late day. It is not enough to simply see that the child can breathe through both nasal passages.

The treatment a child's face gets during the first few years of its life, has much to do with the value of the organ in years to come. If the child is left to itself when learning to walk, if allowed to rub its nose on the floor or walls when angry, if slapped and struck either with the parents hands or while indulging in rough boyish sports, the parts being soft, may be so bent or deflected, without attracting any notice, as to cause partial or total stenosis, either at once or after thickening of the membranes from the pathological condition has occurred.

Sukerkandle, makes the statement that deflections and deformities do not occur before seven years, and Welcher says four years. This does not exclude the theory that many are due to traumatic causes received at the time of delivery, because the deformity, except of fracture and displacement, is always slow in developing.

Stenosis, whether due to paralysis of the Dilator Nasi, dislocation of cartilages, ridges or spurs on septum, structural changes due to traumatic or idiopathic causes,

polypi, exostoses, rhinitis, changes in one or all of the turbinated bones or bodies, adenoid growths, enlargement of glands, congenital narrowing, deflections, tumors, single or multiple will be followed by mouth breathing.

Mouth breathing when practiced for any considerable length of time is sure to be followed by changes in the lower respiratory tract.

The greater cause of this is undoubtedly the preverted function forced upon the mucous membrane lining the mouth, pharynx, larynx, trachea, bronchial tubes, and and perhaps the bronchioles and vesicles themselves.

One organ can perform the work of another for a limited period without detrimental effect, but when long continued, the first will from non-use, undergo a still more degenerative process, and the second will at first be the opposite. Congestion, granular enlargement, thickening of the membrane will ensue. This may become an established function of the part, but more likely will degenerative changes occur and leave the parts pale and anemic, without means of performing its own work properly.

Laryngitis, tracheitis or bronchitis may thus rapidly (yet chronically) follow one another, by the influence other than "the presence of the discharge or of the proximity of one diseased mucus membrane to another."

Bosworth, says: (page 192) "Any patient, I take it, suffering from an obstructive lesion of the upper air passages by which the respiratory function is in any way hampered, thereby feels, to a certain extent, the systemic effect of the resultant impairment of the process of oxidation."

Admitting now, that the nasal chambers are the place for these changes in humidity, and temperature to be made, and not as our physiologies would lead us to believe, in the lungs, we can readily see what an immense influence this extra work would have on the lower respiratory tract.

Such changes as would occur would be an open source

for infection of many diseases, notably, Pulmonary Tuberculosis.

Dr. Jarvis, stated in the New York Academy of Medicine, January 25, during a discussion in the section of Laryngology, that he claimed to be the first to present to the profession "the causal connection between pulmonary diseases, and a hereditary malformation of the nares."

In a paper before the academy sometime before he had pointed out the remarkable connection existing between malformed septa and pulmonary phthisis.

Our observations at the Sanitarum for diseases of nose throat and lungs coincide. It is a fact that our phthisical patients have deformed septa almost without exception.

Why Dr. Jarvis said "hereditary malformations" I do not know. Are these malformations hereditary? And do they aid in the predisposition and causation of the disease or are they developed or exaggerated by it?

The relation of naso-pharyngeal troubles to pulmonary phthisis might be explained as follows: While the rhinitis, which occurs with most pathological nasal conditions could not directly provoke pulmonary phthisis, nevertheless, the pathological condition produced by the various symptoms in the shape of mouth breathing, profuse and persistant expectoration, irritation and tension of the larynx, loss of sleep by interference with normal rest,—a common complaint in these cases,—nausea and stomach disorders, all combine to eventually depress the patient, and should he happen to be predisposed by environment and contagion to phthisis, the bacilli are apt to find a ready lodgement in the pharynx of such individuals, since they offer the proper field so emphatically insisted upon by Koch as necessary for the growth of the bacillus tuberculosis.

The nasal cavities themselves seem to have almost an entire immunity from tuberculosis. In the annual of Universal Medical Sciences for 1888, Cartaz states that

up to that time only 18 cases have been reported, leaving out all cases of lupus.

The functions of the parts retard the entrance of the bacilli, but why tubercular deposits should be so exceedingly rare when the trouble is so prevalent is a question. Primary tuberculosis of the larynx occurs more frequently, but here also the cases are comparatively rare which are recognized as truly primary.

The direct and indirect effects of the recent epidemic of la grippe left many predisposed to tuberculosis.

No system of nasal obstruction is more apparent than the change in the voice. This will not show however, until the trouble is well advanced. We have all had experience in this in taking cold and having, as the laity call it, a "nasal twang," but which is in reality an absence of the nasal twang or resonance.

Hypertrophy of the pharyngeal tonsil will produce what Meyer, calls the "dead voice" (similar to that produced by a cold in the head.) m and n are pronounced as eb and ed. The enlargement does not need to be extreme to produce these changes.

A voice to have resonance must come from a pharynx having a clear vault and the nasal chambers must be such as to not interfere with the passage of sufficient air for ordinary respiration.

One may have structural changes such as hypertrophy of the pharyngeal tonsil, without being aware of it, but let him speak or sing for a long time and his audience will soon recognize that something is at fault.

The singer may have a perfect voice in the middle and lower register, but will break down completely in the higher, attempting the higher and noticing he is at fault, he strains and with the result of, according to Bosworth, breaking some muscular fibre or some of the capillaries, and a laryngitis is the consequence.

Ingalls says as long as he confined his applications in laryngitis to the larynx his results were often negative, but when he turned his attention to the vault and nasal chambers he had better results.

Headache is a very common symptom of nasal disorder and especially does this hold true in the stenosed condition due to enlarged turbinated and deflected septum. Pathological conditions of the chambers are always predisposing causes to changes in the frontal and ethmoidal sinuses.

It is not the intention in this paper to take up the much discussed question of "reflexes," but we must mention the cough which comes as a reflex from polypi, adenoid growth or hypertrophied pharyngeal tonsil. This cough may be to rid the pharynx of a discharge from the vault or it may be purely of a nervous type. When no cause can be found in the larynx, pharynx or bronchi, a thorough examination of the nasal cavities should be made.

The function of olifaction will be impared where we have not free nasal respiration and we are crippled both in enjoyment and also in a prophylactic. "To taste" means "to smell" and "to smell" "to taste." Impair the latter and the former suffers.

Ear complications follow any marked enlargement at the vault of the pharynx. Chronic post nasal catarrh generally involves the eustachian tubes.

Conjunctivitis, and epiphora occur with more acute cases of rhinitis, the latter due to closure of the nasal duct from enlargement. Likewise when the condition in the nose becomes chronic "weak eyes" result. Where glasses fail, examine the nose.

The facial expression following chronic occlusion of the nose is most distressing. This occurs mostly in childhood and to see a child with mouth open, eyes partially closed, nares contracted, head rotated backward and thrust forward, face pinched and child anemic, always is deserving of the greatest pity and our most careful attention.

Of course a case in this condition is the extreme, and yet how long before one having the early symptoms may have this idiotic look?

The mind itself is in the condition indicated by the

face and brain cannot be developed under any such circumstances.

Stenosis of the nares tends to produce, with every act of inspiration, a rarified condition of the air in the lower respiratory tract, particularly in the bronchi. Continued local rarifaction such as this will cause an enlargement of the superficial blood vessels, hence the congested and so-called penciled throat so often seen in stenosis.

Dr. Hooper, of Boston, has shown that if we do not have a free circulation of air in the nose the cavities in communication with the nares, frontal, maxillary, sphenoidal and ethmoidal sinuses do not have the air changed and when this occurs the bones cease to develop. He describes at length the changes in the palate and contour of the face.

There is another class of deformities resultant mostly from vegetations at the vault of the pharynx. This is the "flat chest" and is due directly to the obstructions.

Where oral breathing is constant the lungs suffer constantly from want of sufficient breath on the part of the patient.

Hooper also describes and explains this by a difference of air pressure viz: An excess externally to the internal presure, together with the labored action of the diaphragm and intercostal muscles. Such a deformity must necessarily predispose to serious lung trouble.

Mouth breathing is much harder on the patient than many suppose. Let one accustomed to breath through the nose force himself to mouth breathing a few moments and he soon sees the difference. There is not that ease of inspiration, and it seems as though the diaphragm acted less, leaving the work to the chest walls.

There is another condition arising with every act of inspiration of which very little notice has been taken. Supposing the nares to be occluded to such an extent that nasal respiration is diminished one-half or altogether—now without any speculum in position watch the external portion of the nose. On inspiration a marked depression will occur; this disappears during expiration.

This depression is caused by the suction which draws the external walls towards the septem.

The lateral cartilages loose their rounded shape, the muscles loose their pewer of contraction and the condition becomes more or less permanent.

The muscles mostly affected are the levator labii superionis alaeque nasi, the anterior dilator and the pyramidalis.

The condition becomes in itself really a part of the disease, and is often overlooked by the physician because as soon as the speculum is introduced the parts are thrown out and the stenosis relieved.

Cases appear in which this is the whole trouble, and an examination of the nasal chambers with speculum in situ may reveal nothing.

We thus, very easily, can entirely overlook the trouble merely by expecting to locate the trouble in the nasal chambers or vault of the pharynx.

I have avoided the subject of asthma thus far and do not now intend to go into a discussion of this trouble.

Our journals have been full of "asthma as a reflex" during the past year, some even going so far as to say there is always a pathological condition in the nose.

There are cases of asthma dependant upon nasal troubles, deformities, hyperaesthesia, enlargements etc., but for any one to take the position that this disease is always due to nasal troubles is absurd.

We have under treatment now a case we have greatly benefitted by operations with the saw. A report of which we may make at another time.

A PLEA FOR A HIGHER MEDICAL EDUCATION.*

BY J. W. LONG, M. D.

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Ladies and Gentlemen: A few weeks ago there was a meeting held in this court house for the purpose of organizing a county board of health. At that time it was suggested that we ought to have a county medical society. The suggestion was acted upon and this day appointed for the organization. It was also suggested that some one be elected to deliver an address on this occasion, to which the public should be invited: and further, that the address should be on "some medical subject of interest to the public." By inference I judge that some medical subjects are of interest to the public and others are not. I had hitherto thought that as doctors practiced mostly on the public—rarely on each other and less often on themselves—any subject pertaining to medicine would be at least of some interest to the public. However, as the gentlemen mentioned above have seen fit to make this distinction, in courtesy to them, I feel it my duty to prescribe to-day with an eye to the interests of the public; and if I should happen to say anything that tastes a little bitter, or produces a slight degree of nausea, or possibly causes "regurgitation of the receptaculum chyli" I hope the audience will not be offended, but remember, please, that the public are generally considered —by the doctors—to be a little bilious on some subjects and need an occasional dose, which will act on the liver. This, you know, will "clarify" the blood, remove the "seal brown" coat from the tongue, and keep you from dreaming so much at night.

But in thinking over the matter it occured to me to enumerate, for curiosity's sake, the medical subjects in which the public are not specially interested. After

*Delivered at the meeting of the Randolph County Medical Association, by Dr. J. W. Long, Superintendent of Health.

thinking, and meditating, and musing, and cogitating, and pondering, and considering, I have been able to find only one subject pertaining to medicine that the public take no particular interest in, and that is the payment of doctors' bills. It may be that the public feel about a doctor's bill as Josh Billings does of debts generally. This astute philosopher says: "I do not pay a debt for two reason: first it's against my interest to pay the principal, and secondly, it's against my principle to pay the interest." However, I may congratulate my brethren of the profession that this is not true of all our patrons; if it were you and I would not be practicing medicine to-day. But seriously, it is estimated that two-thirds of a doctor's services are given "free gratis, for nothing," as the lamented Artemus Ward would say:

I wanted to talk to you a little about

SANITATION.

This word is derived from the Latin word sanus, meaning healthy. Sanitary measures, then, and those means which are employed to protect or improve the health of the people. There is another English word—sanity—that comes from this same derivation, sanus; therefore it may be said that when a town or community is in an unsanitary condition the people living there must be a little insane. Certainly they are not looking after their best interests, for if "all a man hath he will give for his life," and then allow a filthy pig-pen or water-closet to stand near his back door, he needs to have a guardian for him. I am glad that public opinion of to-day not only allows these things to be discussed in public demands that the people be enlightened by those competent to do so: for surely no man, woman or child can truly say, "I have no interest in these matters." No wonder the insurance companies do a good business, for death lurks in every cess-pool, and back alley, and slop tub, and dirty dish-rags; and is borne hither and thither by every passing breeze. If we would spend half the money yearly paid out for life insurance in improving

the sanitary condition of our homes and country, the lives of those insured would in many instances be vastly prolonged. However, this might be unfortunate for those to whom the policies are payable.

It has been proved beyond doubt that certain diseases known as infectious diseases are due to the introduction into the body of a susceptible individual of extremely minute living organsisms—micro-organisms—belonging to the class known under the general name of Bacteria. These parasitic invaders are popularly spoken of as "disease germs" and the object of disinfection or sanitation is to destroy them in infectious material wherever it may be found and thus to prevent the spread of infectious diseases. They are found first in the sick-room, where they are given off from the body of the infected person; and second, outside of it in infected clothing; or into the closets and sewers, into which the excreta of the sick have been thrown without previous disinfection; or in filth beds, which constitute a proper soil for the development of some known disease germs; or in the water of wells and streams contaminated with infectious material by sewerage or surface drainage.

Having this knowledge it is evident that our first effort should be directed to the destruction of disease germs in the sick room; and that, in view of the fatal results which may follow the careless scattering about of such material, it is little less than criminal to neglect disinfection in the locality where the disease germs are propagated, and where their destruction is most easily accomplished.

Of the many infectious diseases we shall have time to discuss only one. The great scourge of this section is typoid fever. In typhoid fever the infectious agent is contained in the alimentary canal, and only those articles in the sick room which are liable to be soiled by discharges therefrom are apt to become infected. In these cases, therefore, the problem is reduced to the simple precaution of disinfecting the bedding and clothing used during the attack. As the infectious agent is not given

off from the general surface of the body this disease is not transmitted by personal contagion. Remember that, please. I am often asked: "Doctor, is this fever "ketch-in"?" I invariably answer: "No; not from the patient, but from the clothing and discharges." If a typhoid fever patient is bathed all over and the bed-linens and clothing changed every day there is no danger of contracting the disease from the patient. The source of the infectious germ in typhoid fever is possibly shown by the Plymouth epidemic. This case will also illustrate the disastrous results of neglecting sanitation. The town is situated between a river and a mountain. The water supply comes from a mountain stream, which has four dams across it, making as many ponds. During February and March a man living in a house on the bank of the stream between the third and fourth dam had typhoid fever. The ground was covered with snow. The excreta was thrown on the snow between the house and stream. Towards the latter part of March a thaw came, sweeping everything into the pond. About this time the third pond, being the one just below the sick man's house, was tapped by the town. Within two weeks over 800 cases of typhoid fever had developed in that town, where not a single case existed before. That the pond was the source of the fever is further proven by the fact that about one fourth of the town was supplied with water from wells, and among this fourth not one of the primary cases occured. This incident further shows: First, that freezing does not destroy the germ of typhoid fever; second, that one case may infect a whole town, in fact, as many as come in contact with the germ. But remember, please, that "cleanliness is next to godliness," and when you enumerate your sins in your prayers tonight don't forget to mention the very unsanitary condition of your immediate surroundings.

Sanitation is preventive medicine. Prevent disease from occurring. The whole gist of sanitation is summed up in the Irish bull, "The only way to prevent what's past is to put a stop to it before it happens."

MEDICAL SUPERSTITIONS.

The "medicine man" of the Indians was a being supposed to be possessed with supernatural attributes. The preparation of his medicines and their administration were enshrouded in mysticism, their "dynamic potency" being increased by incantations and meaningless symbols; while both the doctor (?) and his drugs were regarded with a superstitious faith equalled only by that of modern Americans in "patent medicines." Ah! what a familiar note I strike! A household article, an indispensable! Baby lulled to sleep with "Mother Winslow's Soothing Syrup;" Sammie's pains rubbed out with "Wizard Oil;" Mollie's "scrofulo" cured with "Mrs. Person's Remedy;" Uncle Jim's rheumatism relieved with "Swift's Syphilitic Specific." If I had to take that medicine I would pour it into another bottle and break the one that was labeled "S. S. S." The old man gets too lazy to work and says he's "broken down in the back," so he takes "Warner's Safe Kidney Cure;" and mother is overworked—no wonder when she has to see after such a family as this, and the country is full of them—and she takes "Dr. Pierce's Favorite Prescription;" while semi-occasionally the whole family are waked up soon in the morning by "Simmon's Liver Regulator." But what is worse, the boys get out of whiskey, or are ashamed to buy it, and so get drunk on McLean's Strengthening Cordial," or almost any other patent medicine they can get hold of, for with scarcely an exception every one of the so-called "bitters" or "tonic invigorators" contain a large per cent. of alcohol. I know what I am talking about. It is nothing uncommon to see or know of a fellow drunk on "McLean's Strengthening Cordial," "Mrs. Person's Remedy," "Harter's Iron Tonic," or some one of a long list of such patent medicines.

This is only one of the evils of patents medicines. A man told me he had kidney disease. I asked him how he knew. He replied with considerable warmth that he *knew* he had it; that he didn't need any doctor to tell him that. He drugged himself for a long time with

"Warner's Safe Kidney Cure," paying out more money for it than he ever did pay me, although I do the practice for his family. Several months after this conversation he came to my office and asked me to take charge of his case; that he was no better but worse than ever. Of course the first thing I did was to examine his kidneys when, much to the patient's chagrin, I found them perfectly healthy. He had spent his money, made himself, wife and children miserable by his complainings, and forced himself to believe a vital organ the subject of a disease which if true would have cost him his life. Had this man's back quit hurting him or ever got better while taking the patent medicine, he would have written out a long certificate, stating that all the doctors had failed to cure him, but he was miraculously cured by a few bottles of this medicine. No wonder they (the doctors) failed; he had never tried them, and I often find this to be true. 'Tis just such fellows that cause quackery to flourish; and I am sorry to add that these certificates are frequently signed by those from whom we look for something better—our preachers. This man loaded himself with medicine when there was nothing much the matter with him; on the other hand, I have seen patients contentedly drinking these vile nostrums, or parents pouring them into their children, when they were possessed with a disease that was rapidly proving fatal, and in many instances when the patient might have been saved by proper treatment. But it seems as if men loved to be humbugged now almost as well as in the dark ages, to judge by the success which still attends patent medicine or any medical adventurer whose pretensions are sufficiently extravagant to attract general attention.

My old uncle, Wm. J. Long, whom many of you know, used to say: "People are like little birds in a nest; tap on the nest and they will open their mouths if you drop in a gravel." When I see people taking or giving to their children these patent medicines I am reminded of what Poindexter said: "The man who appears for himself in court has a fool for a client." These legal gentle-

men see the point. The Hindoos consider a cow a sacred animal, and when a man is dying they bring a cow and make the dying man take hold of her tail, believing—I mean the Hindoos believe, not the cow—that at the moment of death the man's soul passes out through his arm up the cow's tail and into her body. From the way in which some people take patent medicines it would seem that they believe them to contain the very "elixir of life"—the essence of "eternal youth." Which faith is the more absured? As for me I would rather hold to the cow's tail. But should the laity be censured for these things when in so many instances the doctor is worse than the patient? He is worse because if anybody should know better it is the doctor. Not two weeks ago an M. D. of this county, in apparently good standing, (?) with his diploma and a flaming certificate, signed by prominent men, of qualifications and long experience, went to a patient of mine in the last stage of consumption and tried to sell several bottles of his medicine which he guaranted to be a "sure cure" for consumption! Now, just to the extent of that man's influence will this pernicious doctrine of "sure cure" go. When doctors talk of "sure cures" we may expect people to believe in "sure cures;" and as patent medicines and quacks *never fail* to cure, as a matter of course the people will patronize them.

What the laity need is not to be more thoroughly instructed in medical science, but to be taught to distinguish between the true and the false, between the charlatan and the honest, conscientious physician. This task will take more than one generation, and will only be accomplished through the influence of the profession, who, it must be confessed, too often encourage the ignorance which they ought to enlighten.

"In the popular mind," says an eminent writer, "the practice of medicine is too closely connected with the use of drugs." It is the most unfortunate thing in the world for both profession and laity that doctors, and this is especially true of country doctors, ever carry their own

medicines; for people soon come to regard the doctor as a peddler—of medicine, of course—and not only are his services estimated by the amount of medicine he gives, but they lose sight of the proper function of the physician. The result is that if the doctor hopes to hold his case he pours in the medicine whether the patient needs it or not. Why, there is not a doctor here who hasn't given many a dose of medicine when he knew the patient did not need it. Fie on such a practice and the state of public opinion that demands such a thing!

The writer referred to says further that "it is desirable for the public to understand that the proper office of the physician is to observe cases of disease and to futher prescribe or withhold remedies according to the indications." The medical education of the laity will be complete when this truth has once been grasped. It will cause an entire change in the present attitude of the physician toward his patient. The former, instead of assuming a knowledge which he does not possess, will venture to express his honest doubt occasionally, and, while he promises less, will feel that he still retains the confidence of his patient, who will understand that greater learning leads to greater humility. The conscientious beginner may then feel that success in medicine is to be attained by a frank and open expression of opinion with regard to his patient's case, instead of by adopting the method of promising everything and performing little. Let the word "cure" be less frequently on the lips of the educated physician and it be less often demanded by the public as the sole testimony of professional success. We shall succeed in educating our patients to take a common sense view of medicine only when we are ourselves honest and free from pedantry. We do not try to impose superficial knowledge upon our confreres—why do we endeavor to deceive the laity?

There is another question I would like to discuss, and that is the education of physicians. It is well known that we have in this country a class called "cancer doctors," and while they are not recognized by the regular

profession yet they prescribe and accept fees for the same. Now the first qualification necessary to success as a "cancer doctor" is *supreme ignorance*. The less his learning, the greater his following. Let's take a step higher and tell me, please, how many men there are practicing medicine in Randolph county now and in the past who never attended a course of lectures—who stepped from the plowhandles or some other avocation directly into the practice of medicine. Just count them up and you will be surprised. Again, another step, and how many of our physicians have taken only a few months' lectures, one course, and this sometimes with little or no preliminary training. I appeal to you, brethren, among whom are some of the best men in this land, if with no better training than this your conscience is clear to take into your hands the issues of life and death? And still another step: How many physicians in this country have attended more than two courses of lectures? I wait for an answer. In this day when post-graduate courses and hospitals are open on every hand: when the science and practice of medicine and surgery are revolutionized in half a decade, are we, we young men, who flaunt our diplomas in the faces of these grand old veterans who have ridden through the heat of summer and cold of winter for twenty, thirty and forty years, are we doing our duty to sit contentedly down because we have a diploma and a State license? I declare to you to day that I am ashamed for the people of Randolph to know how much we neglect these things. No wonder we have to send off for consultations and our surgical cases go to Philadelphia and New York and Baltimore! We are not worthy to be entrusted with them. Again, our libraries—they are older than our first professional babies, and if we happen to have a new book—we would have a new book, and that's all, for four times out of five we don't read it. These *older* brethren might say like Oliver Wendell Holmes' old doctor in one of his novels. The doctor was sixty-three years of age, and a shrewd, old-fashioned practitioner. He admits he has not many

printed books, "and what I have I don't read quite as often as might, I'm afraid. I read and studied in the time of it when I was in the midst of the young men who were all at work with their books. When a man that's once started right lives among sick folks for five and thirty years, as I've done, if he hasn't got a library of five and thirty volumes bound up in his head at the end of that time, he'd better stop driving around and sell his horse and sulky."

Well, I think so, too; but wouldn't we have a big sale in these parts?

I have often heard that "experience is better than learning," but I wouldn't give a cent for experience without learning. I have found that those men who decry the books and say "it won't do to go by the books every time" are the men who don't know which way the books do say go. "Reading maketh a full man," and he who is well read is in prime condition to gain "the wisdom of experience." Other things being equal, the most successful lawyer is he who knows the law. The same is true of doctors.

"The physician himself" is an essential factor in every community. What city or rural district can do without the doctor? And yet who is there who would not be glad with exceeding great joy could they do without the doctor? There has not been but one such time and place —the place a garden; the time before apples ripened. And I have thought that these specific apples were "May apples," or at furthest "early June." The doctor stands at the "point of power" in the lives of more people than is usually thought. Let me go into a community and hear the people talk and I can tell you what their doctor thinks. Do they talk of "vitiated bile?"—their doctor believes in a theory that has been punctured more than a score of years. Do they speak knowingly of "breaking up typhoid fever?"—their doctor's ideas are more antiquated than Southern slavery. Do they (the people) say "it is best to let the children have the measles the first good chance they get?"—their doctor ought to be in the

penitentiary for wholsale homicide! The doctor! The man whom every one has the right to abuse—a right that is rarely neglected—the man to whom all flee in the hour of sickness and distress! Nor does any one see people as does the doctor. The decorations and deceptions of character must fall away before the great realities of pain and death. The secret of many hearts and homes must be told to this confessor, and sadder ailments than the text-books name are brought to be healed by the beloved physicians. Teachers of truth and givers of the laws of life, priests and ministers, all these professions joined in one with the gift of healing, are each part of the charge that a good doctor holds in his keepings.

I thank God that I spring from the loins of a man who spent his life—who gave his life—in the relief of suffering humanity. And while he left me neither prestige of aristocracy nor heritage of money or lands, yet by his life he instilled into my heart a desire to succor those in sickness and distress that I would not exchange for wealth, nor royal titles, nor blnest blood that ever ran! Let me be what I am and do the life-work set before me after the pattern of Him who restored the dead brother to the weeping sisters, and in the spirit of the father whose ashes rest beneath the sod. This is the grand, the absorbing ambition of my life.

I would not have you think for a moment that a doctor's life is all night rides and rain and vexation of spirit, for it is quite the reverse. The strongest friendships I ever formed have been among my patients; some of the happiest hours of my life have been spent in social communion with those for whom I prescribe; besides, how often we are gladdened by the grateful tear and words of commendation,

"Acknowledgment of grateful heart
That the doctor sometimes does his part."

In conclusion let me thank the gentlemen who honored me by election to this position; also the citizens who have listened with such kind attention to these remarks.

SOCIETY TRANSACTIONS.

The Southwestern Ohio Medical Society held its third semi-annual meeting in Cincinnati, Oct. 16 and 17. Dr. J. C. Reeve, of Dayton, Ohio, was president and Dr. W. W. Hall, of Springfield, Ohio, secretary and treasurer. The address of welcome was delivered by Prof. James T. Whittaker. The scientific portion of this address dealt with typhoid fever in Cincinnati, and the inadequate and infected water supply, and contained some good advice to the municipal government on its duty in the premises. He also took up the subject of the prevention of tuberculosis.

Dr. B. M. Ricketts read a paper on the surgical treatment of epilepsy and presented a case. Dr. H. M. Brown, of Hillsboro, read a paper on chloroform and Dr. S. P. Deadofe, of Potsdam, on hysterical paraplegia in a child twelve years old. Drs. R. B. Hall and C. A. L. Reed, of Cincinnati, presented papers on abdominal surgery and Dr. R. W. Stewart on the hygiene and sanitation of tuberculosis.

The president, Dr. J. C. Reeve, who is one of the recognized authorities of the country upon matters pertaining to anæsthetics, delivered an interesting and instructive address on "Anæsthesia and the Hyderabad Commission."

The second day papers were read by Dr. T. H. Patton on "Cardiac Disease in Soldiers," and Dr. Trimble of New Vienna on "Obstetrical Experiences;" and by Dr. H. B. Richardson on "The Treatment of the Curable Insane."

Dr. J. N. Bartholomew, of Trenton, Ohio, reported a successful case of Cæsarian Section, he having saved the lives of both mother and child.

The scientific program was closed by a general discussion of "Peritonitis."

Dr. Dan Milliken, of Hamilton, was elected president for the next meeting, which is to be at Hamilton, O., April 7, 1891.

SCIENTIFIC PROCEEDINGS OF THE ACADEMY OF MEDICINE AND SURGERY, RICHMOND, VA., SEPTEMBER 23, 1890.

Dr. W. W. Parker, President, in the chair; Dr. James N. Ellis, reporter.

Dr. John N. Upshur, professor of Materia Medica in the Medical College of Virginia, honorary member of the State Medical Society of West Virginia, etc., read the following paper:

PLACENTAL DISEASE AS A CAUSE OF PREMATURE LABOR.

The sparse literature on placental pathology makes a discussion of the lesions of this viscus one of no little difficulty, and it is only by clinical observation, and legitimate deductions from such clinical facts that we can arrive at conclusions of a practical nature, these being proved only by the successful issue of treatment founded at best upon theory suggested by these clinical facts. Reflections on this subject were suggested to the writer by a case which is made the text of this article and which was one of great interest and concern to him. The welfare of whole family connections, based upon pecuniary considerations or the domestic happiness which often centers in fruitful issue, cannot be over-estimated.

Case.—I was called to see Mrs. Blank, Aug. 5, 1888, in her third pregnancy, advanced to the fourth month; age 29, blonde, health always robust. She had lost two children at the beginning of the seventh month, being attended by one of the leading physicians of this city. Careful inquiry failed to elicit the history of any imprudence on her part—a jar, a fall, or any tangible cause for the premature labor. The history of both the first and second pregnancy was identical with the third. There was no swelling of hands or feet, no headache, and careful analysis failed to disclose the presence of albumen or any functional derangement of any organ whatever.

She was enjoined to be as quiet as possible, avoid going up and down stairs, to keep early hours, and given inct. of chloride of iron and uterine sedatives, and

watched most carefully and anxiously. Soon after entering the sixth month the movements of the child became each day more and more feeble and irregular, and she began to complain of a weight in the hypogastrium; motions of foetus ceased and labor came on at the beginning of the seventh month, Oct. 28. Labor easy and rapid. Fœtus cried feebly once or twice; presented a s swollen appearance with more or less sclerotic condition of skin, cord empty of blood, placenta firmly adherent, requiring nearly three-fourths of an hour to remove it; uterus contracted well and firmly. The placenta was *very soft*, pale and anaemic—so soft as to drop to pieces by its own weight, or a portion of it.

Patient became again pregnant early in January, '89. Carefully reflecting on the condition of the placenta and the history of the two previous pregnancies and deliveries, I concluded that the cause of the death of the fœtus and premature delivery was a latent endometritis, stimulated to active progress by pregnancy and the implantation and development of placenta, the inflammatory condition extending to the placenta, producing fatty change, cutting off the circulation of the fœtus and consequent death so soon as the pathological change had progressed far enough. All history of syphilis could be absoluted eliminated, because both parents were exceedingly anxious for issue, and I am confident that I elicited from the husband the whole truth as to the history of his sexual life. He had once had a mild gonorrhea previous to marriage. Suspicion here, you say, of urethal chancre, but if so, why did he not have bubo and secondary symptoms at the time and tertiary symptoms succeeding? None of which he has ever had, nor has he ever had any syphilitic treatment. The women herself is absolutely above reproach. So soon as I was informed of the occurence of pregnancy for the fourth time I put the patient upon the most active, alterative treatment of the bi-chloride mercury, red iodide and chloride of gold and sodium, varying these alteratives, and keeping up the treatment for six months. Patient also drank lithia

water freely. I desire in this connection to especially commend the chloride of gold and sodium as an alterative, its action in the dose of ½ gr. to 1–20 gr. in combination with extract of one of the bitter tonics is in many respects similar to that of the iodide of potassium. But I believe it has a special influence in modifying inflammatory conditions of the endometrium, and in my hands has certainly been productive of very great benefit. The patient progressed beyond the usual danger point and was delivered safely at term; labor easy and rapid, child a magnificent specimen and free from every blemish; is now more than a year old and has been singularly exempt from the usual infantile maladies. The placenta was healthy.

Remarks.—Galobin speaks (page 298) of inflammation the decidua which may arise from previous endometritis existing prior to conception, and it may exist in the vera, or reflexa, or serotina. He says the study of inflammation in this situation is difficult because the cell proliferation of the decidua is analogous to that which takes place in inflammatory process. It is the inflammatory process in the decidua serotina which chiefly effects placenta. Symptoms of this trouble are soreness and tenderness over the uterine globe, but may be entirely absent. The same author above quoted says that fatty degeneration may be partial and then the fœtus may be born alive, but that when "*extensive it may directly kill the fœtus by cutting off the supply of blood.*" Parvin (Science of Obstetrics, p. 275) speaks of the distinction made by Dr. R. Barnes between fatty degeneration and fatty metamorphosis—"the former begins in the living, the latter is found in the dead tissues." In Cazeaux and Tarnier (p. 551) is found the expression of doubt as to the ability to fix the symptomatology of this lesion, there being only evidence of uterine congestion manifested in some cases by weight in lower part of abdomen, pain in loins and down the thighs. But these symptoms may be present when other placental lesions exist. There may be apoplexy, sclerosis, syphilitic dis-

ease, cancer, etc. It is not pertinent to the subject under discussion to consider these, nor will time or space permit. I have been lead to consider the subject from its present standpoint because of the success attending the treatment of repeated premature delivery, based upon the theory enunciated, and because in the light of such it may point the solution to some case of similar difficulty.

Supplementary to his paper and in reply to questions, Dr. Upshur called attention to Galobin's opinion that a peculiar pinkish color of, and the presence of watery gummæ in, the placenta was evidence of syphilitic disease of that organ. But he is satisfied of the absence of any syphilitic taint in the case reported. The success of the alterative treatment might also suggest syphilis. But he has seen decided improvement in simple endometritis from the exhibition of the chloride of gold and sodium. He ascribes the good result in the above case principally to the use of that salt. The general health of the patient was good.

Dr. Hugh M. Taylor was reminded of a patient who lost her first three children at about the eighth month. In all of these pregnancies preventive treatment was adopted. Subsequently she had three children; no preventive treatment was attempted and all of the last children were born alive, strong and robust. Thinks we sometimes credit medicine with alterative influence it does not deserve.

Dr. Moore does not think that conception can take place in a uterus which at time of connection is the subject of corporeal endometritis. The leucorrhea consequent upon such diseased condition effectually impairs the vitality of the spermatozoa or by its flow washes the ovum from the uterine cavity. But even if conception takes place it is impossible for gestation to safely progress, and abortion or miscarriage results. Where conception takes place in a healthy uterus and endometritis subsequently occurs the pathological changes consequent

[CONCLUDED IN NEXT ISSUE.]

THE ASHEVILLE MEDICAL REVIEW.

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EDITORIAL.

The Choice of A Health Resort.—The busy practitioner is frequently called upon to select a health resort for his patients, and he should in justice to them be prepared to give intelligent advice upon a question often of vital importance. He must often ask himself, if conscientious in the discharge of his professional duties, where shall this invalid be sent to recuperate, and where can that one best pass through the severe winter months? The first question may arise at any time of the year, and the second one when the cool fall mornings come as a reminder that winter, with her ice and snow, and rapid changes of temperature, is near at hand.

It will generally be conceded that a convalescent, recovering from an acute disease that has made a heavy draft upon his vital forces, can be more rapidly restored to health by a complete change in his surroundings than in any other manner. While he may drag along at home

on tonics and so forth for weeks before any decided change in his condition is seen, he will feel as though a new lease of life had been given him after a few days in the mountains or at the sea-side, and will be able to return to his usual vocation in a much shorter time and in a vastly better physical condition than if he had remained at home. This proposition holds true even if the individual resides in a healthy region.

The only successful treatment of tuberculosis is the climatic and hygienic. This is as far as our therapeutics go in the treatment of the scourge of the human race. Taken early, in favorable cases, a residence in a carefully selected region under intelligent supervision, will show a larger percentage of recoveries than that under any plan of medication yet suggested in localities not favored with good climates. Even should the investigations of Koch result in giving us an agent that will tend to eradicate the bacillus from the organism it is more than probable that climate will still have a very important role to play and be found necessary to prevent relapses, and aid the medication in its action.

Winter in northern cities has little comfort in store for the consumptive. An indoor life for the greater part of the time is forced upon the sufferer, which means a deficient supply of oxygen, and oftimes in the dwellings of the rich an atmosphere that has been rendered absolutely unfit for the proper oxygenation of the blood an account of the means of heating it employed.

Therefore, these questions are frequently presented to physicians, and only too often answered in a general way, as, "I should advise you to go South for the winter," or, "a trip to the mountains or sea shore would benefit you." Thus the all-important decision of where to go is left finally to the patient and his friends. It is true that those engaged in advertising certain places and resorts are accustomed to make the most positive claims for the place in question, and books are written for the benefit of this or that region which are more remarkable for the extravagance of their assertions than for their adherence

to the truth. The Asheville Medical Review has published the observations at the U. S. Signal Service Station for the last eighteen months in order to present the the climate of Asheville to the profession as it is, and to give those desirous of having accurate information of Asheville's climate the opportunity of studying these reports and of following from month to month the reports of the current year as presented in monthly tables furnished by the observer at the station.

Accurate reports of scientific observations are all the more valuable because it is impossible for physicians to personally visit and examine the different places that are generally known as health resorts. Of course there are many important elements of a good climate that can not be given in tables and which must be personally seen or experienced to be appreciated.

In the invigorating air of the Asheville plateau the convalescing patient feels himself strengthened at once, while the beautiful panorama of mountain peaks and green hills with fertile valleys and winding streams between them, afford an ever changing and constantly enchanting variety of scenery which invites to pleasant recreation and exercise of numerous kinds without fatigue or ennui. The consumptive finds here the tonic atmosphere with its large percentage of ozone, and the low absolute humidity of the air, the remarkably dry soil, and an elevation sufficient to insure purity of the atmosphere without incommoding the heart's action, except in a very small percentage of cases.

Asheville is so favorably situated that her winters are mild and her summers cool and pleasant, thus furnishing a home the year round to which invalids may flee for protection against the heat of summer and the cold of winter.

H. L. T.

METEOROLOGICAL.

EDITORS ASHEVILLE MEDICAL REVIEW: I herewith submit the meteorological observations for October, and a summary of the monthly means for the past six months.

You will note that the conditions of temperature relative and absolute humidity have been very favorable indeed, with but little variation in either from day to day and month to month, a condition very desirable from a medical point of view. The number of fair and clear days during the past summer range from 25 to 29 for each month, with an average of 27 for the season, and I have seen nothing to equal this in the reports which reach this station from other parts of the country. The amount of ozone in the air reached its lowest in the month of July and has since been steadily increasing; similar conditions were observed in the past, and while I have no explanation for this variation, it is nevertheless of interest to note that the amount seems to vary with the temperature, being greatest during the cooler and winter months.

We are now entering upon the most favorable season of meteorological conditions for Asheville and its vicinity, and judging from expressions of many of the most prominent men in the Eastern cities whom I had the pleasure to meet during a recent visit to New York, Boston, Philadelphia and Baltimore, I am safe in predicting that Asheville will have a greater number of winter guests than ever before.

Respectfully yours,

KARL VON RUCK, M. D.

Summary of Meteorological Observations

MADE AT

THE UNITED STATES SIGNAL SERVICE STATION, WINYAH SANITARIUM, ASHEVILLE, N. C.

Elevation above Sea, 2,350 feet. Latitude 35.36 N. Longitude 82.26 W. Hours of Observation, 7 A. M., 2 P. M., and 9 P. M.

Self-registering maximum and minimum thermometers. Instruments exposed in standard U. S. Signal Service Shelter. Barometric reductions for altitude and temperature at 32°F averages about 2.5 inches. Ozone observations after method of Negretti and Zambra.

SEASON.	MONTH.	Mean Temperature.	Mean Max. Temperature.	Absolute Max. Temp.	Mean Min. Temp.	Absolute Min. Temp.	Mean Daily Range Temp.	Mean Daily Variation Temp.	Mean Relative Humidity.	Mean Absolute Humidity. (Grs. Moist. per. cu. ft. air.	Mean Barometer corrected for Altitude and Temp.	Mean Amount Ozone (per ct. of possible 100.)	Total Amount of Rain and Melted Snow, in Inches.	No. Days on which 00.1 or more Rain fell.	Snow Fall in Inches.	No. Clear and Fair Days.	No. Cloudy and Rainy Days.	No. Days without Sunshine.
Summer of 1890.	May	62 41	73 39	83 60	52 13	36 00	21 26	3 07	61 85	39 11	30 07	46 45	4 44	15	.....	29	2	.....
	June	71 68	83 19	90 10	61 18	53 40	22 01	2 60	71 94	61 57	30 10	35 50	1 13	8	.....	29	1	.....
	July	70 78	81 09	88 50	62 23	55 50	18 76	2 51	71 85	58 60	30 14	31 61	5 86	15	.....	27	3	.....
	August	67 91	78 31	86 20	59 29	47 00	19 02	2 48	72 23	54 62	30 17	34 80	6 71	18	.....	27	4	2
	September	63 53	76 14	86 00	58 23	49 80	17 91	2 65	77 94	54 67	30 17	38 50	3 86	15	.....	25	5	2
	October	53 09	63 88	80 00	44 44	29 50	19 44	4 01	70 22	33 07	30 13	53 71	3 77	9	.....	28	3	3
	Sums	391 43	456 04	513 80	337 50	271 30	118 40	16 72	426 03	301 64	180 78	241 57	25 77	80	.....	165	18	7
	Means	65 24	76 00	85 63	56 25	45 20	19 73	2 79	71 00	50 27	30 13	40 26	4 29	13 33	.....	27 67	3	1 16

KARL von RUCK, B. S., M. D., Director of Observatory.

C. P. AMBLER, M. D., Observer.

UNITED STATES SIGNAL SERVICE STATION, WINYAH SANITARIUM, ASHEVILLE, N. C.

SUMMARY OF OBSERVATIONS FOR OCT, 1890.

(For the Asheville Medical Review.)

	7 A. M.	2 P. M.	9 P. M	Daily Mean.
Monthly Mean Temperature	46.98	61.23	51.96	53.09
Relative Humidity	82.93	55.13	71.64	70.22
Absolute Humidity	32.30	33.86	33.51	33.67
Barometer (Reduced to sea level at 32°)	30.16	30.08	30.13	30.13

Mean Maximum Temperature	63.88
Mean Minimum Temperature	44.44
Mean Monthly Range Temperature	19.44
Mean Daily Variation Temperature	4.01
Total Rainfall for Month	3.77

No. of clear days, 20. No. of fair days, 3. No cloudy and rainy days, 8.
Ozone—Per cent. of possible 100—Mean for month 53.71.

KARL von RUCK, B. S., M. D., Director of Observatory.
C. P. AMBLER, Observer.

BOOK REVIEWS.

Address to the Medical Society. By Middleton Michel, M. D., on retiring from its presidential chair. A sketch of the origin and history of the Medical Society of the State of South Carolina, with brief notices of some of the brilliant men of the profession whose names illuminate its records.

Edward Perry & Co., Charleston, S. C.

This address contains much of historical interest, and much to inspire respect for the Medical Society of the State of South Carolina, not alone on account of its antiquity but principally on account of the scientific and original work done by its members. As this work was probably first published at the meetings of the Society, it has a certain claim upon it. The influence of such associations in encouraging scientific research and investigation is much greater than is generally acknowledged, and therefore not too much credit can be given Dr. Peter Fayssoux and his colaborers, Drs. David Ramsay and

Alexander Barron, who in 1789 organized this, the fourth Medical Society in the new world.

This organization took at once an active part in the instruction of the government in regard to the preservation of public health, and offered through its humane society to be ever ready to furnish immediate aid in emergency cases. It showed by liberal donations to the Botanical Organization that it had the cause of science at heart and was ready to support its principles with its cash, always rather a severe test of sincerity.

Among the illustrious names mentioned in the address is Dr. David Ramsay's, one of the founders, and also one of the most illustrious, well-known in the early history of his country, having acted as president of the Continental Congress for a year during John Hancock's illness. Dr. Alexander Garden, the botanist, Dr. Joseph Glover, the surgeon, whose work in the treatment of hydrocephalus, puncture and compression, attracted deserved attention at home and abroad; and many others, that our limited space does not allow us to refer to.

Dr. Michel deserves great credit for his painstaking investigation into the early history of "that ancient and respectable institution, the Medical Society of South Carolina," (as the New York *Medical Journal* of July, 1818 puts it) of which not only the profession of South Carolina has reason to be proud, but also that of the entire country. H. L. T.

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